# SERVICE MANUAL



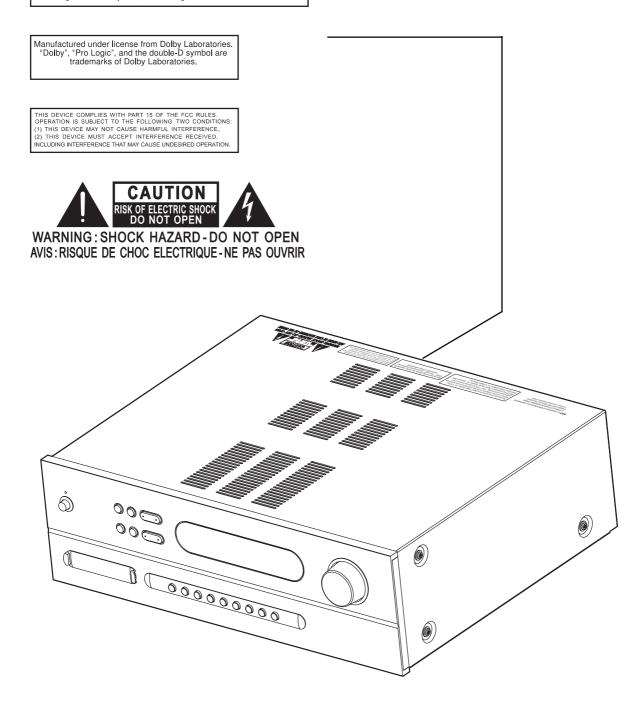
T 752 AV SURROUND SOUND RECEIVER T 752

AV SURROUND SOUND RECEIVER

# **SAFETY INFORMATION**

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## **SERVICE SAFETY PRECAUTIONS**

#### 1. Replacing the fuses

#### **CAUTION:**

FOR CONTINUED PROTECTION AGAINST THE RISK OF FIRE REPLACE ONLY WITH SAME TYPE OF

Reference Designator F751*AH	Part Number 33-0160001-00-48	<u>Description</u> Fuse 8A 250V Time Lag 5x20 MM UL/CSA
F751*C	33-0131002-00-48	Fuse 5A 250V Time Lag 5x20 MM SEMKO/VDE
F752*AH	33-0111006 -00-48	Fuse 1.6A 250V Time Lag 5x20 MM UL/CSA/VDE/SEMKO
F752*C	33-0151006 -00-48	Fuse 800mA 250V Time Lag 5x20 MM UL/CSA/VDE/SEMKO

#### NOTE:

<\*AH > : USA, CANADIAN MODEL ONLY. <\*C > : EUROPEAN MODEL ONLY.

# **2. Safety check out** (Only U.S.A. model)

Before returning the product to the customer, make leakage current or resistance measurements to determine that exposed parts are acceptably insulated from supply circuit.

Parts marked with the symbol <u>A</u> are critical with regard to the risk of fire and electric shock. Replace only with parts recommended by the manufacturer.

# **CONTENTS**

DESCRIPTION	PAGE
SPECIFICATIONS	4 - 5
REAR PANEL / FRONT PANEL VIEW	6
DISASSEMBLY INSTRUCTIONS	7
VIRING DIAGRAM	8
BLOCK DIAGRAM	9
ADJUSTMENT POINTS DIAGRAM / AMPLIFIER ADJUSTMENT	10
PCB LAYOUT	11 - 23
SCHEMATIC DIAGRAM	24 - 36
C BLOCK DIAGRAM	37 - 45
EXPLODED VIEW	46
EXPLODED VIEW PARTS LIST	47 - 48
ELECTRICAL PARTS LIST	49 - 58
PACKING DIAGRAM	59

### **SPECIFICATIONS**

#### **POWER AMPLIFIER SECTION**

Rated distortion	(Rated power level into 8 ohms, THD 20 Hz-20 kHz FL/C/FR)	≤ 0.1 %
	(Rated power level into 8 ohms, THD 20 Hz-20 kHz SL/SR)	<b>≤ 0.1 %</b>

Input Sensitivity (ref. 8 ohms, 1 kHz)  $200 \pm 20 \text{ mV}$ 

S/N Ratio (A-wtd, 1kHz, 1 W, 8 ohm, SL/SR) ≥ - **80 dB** 

(A-wtd, 1kHz, 80 W, 8 ohm, SL/SR) ≥ - 96 dB

Frequency Response (20 Hz - 20 kHz)  $0 \pm 0.8 \text{ dB}$ Channel Balance (1 dB to -40 dB, 1 kHz)  $\leq 2 \text{ dB}$ 

(-41 dB to -50 dB, 1 kHz)  $\leq 3 dB$ 

Audio muting at 1 kHz ≥ 55 dB

Subwoofer out, 500 mV in (THD at 2 V O/P, 100 Hz)  $\leq$  **0.5** % Crosstalk (500 mV input, 10 W, 1 kHz)  $\geq$  **-70 dB** 

Controls

Bass (at 500 mV in, 1 W out, 100 Hz)  $\pm$  10 dB  $\pm$  2 dB Treble (at 500 mV in, 1 W out, 10 kHz)  $\pm$  10 dB  $\pm$  2 dB

#### **DOLBY DIGITAL SECTION**

Channel Difference(FL ref.	Track 30)		± 1.2 dB
Frequency Response @ Do	olby config.2	SL Track 46 200 - 20 kHz	± 0.8 dB
		SR Track 47 200 - 20 kHz	± 0.8 dB
		C Track 44 200 - 20 kHz	± 0.8 dB
Harmonic Distortion (1 W,	Audio LPF, Dolby Config.1)	FL Track 65 997 Hz	≤ <b>0.08 %</b>
		FR Track 67 997 Hz	<b>≤ 0.08 %</b>
		SL Track 68 997 Hz	<b>≤ 0.08 %</b>
		SR Track 69 997 Hz	<b>≤ 0.08 %</b>
		C Track 66 997 Hz	<b>≤ 0.08 %</b>
S/N Ratio	(31 for O/P 1 W, Track 35)	CCIR / ARM	≥ 65 dB
		Audio LPF	≥ 70 dB
		A-wtd	≥ 70 dB
Channel Separation	(1 W, 20 kHz LPF)	Track 65 997 Hz	≥ 75 dB

#### **DOLBY PRO LOGIC II SECTION**

Frequency Resporse

I/P mode : L, R	: 1 V in, 1 W, Ch L/R	40 Hz	0 ± 1.5 dB
		20 Hz	$0 \pm 0.8 dB$
I/P mode : L, R	: 1 V in, 1 W, Ch C	300 Hz	$0 \pm 0.8 dB$
		20 Hz	$0 \pm 0.8 dB$
I/P mode : L, R	: 1 V in, 1 W, Ch SL/SR	40 Hz	0 ± 1.5 dB
		20 Hz	-3 ± 1.0 dB

S/N Ratio (200 mV in, 1 W, A-WTD w/ 1 k termination)

 I/P mode : L, R
 : 1 kHz, Ch L/R
 ≥ 65 dB

 I/P mode : L, R
 : 1 kHz, Ch C
 ≥ 65 dB

 I/P mode : L, R
 : 1 kHz, Ch SL/SR
 ≥ 65 dB

 THD (2.2 V in, 1 W, w/ 80 kHz LPF, 1 kHz)
 ≤ 0.2 %

# **AM TUNER SECTION**

Input level is expressed as the reading in open circuit of 75-ohm source impedance signal generator

Usable sensitivity	(999/1000 kHz)	≤ 30 dBuv
S/N Ratio	(5 mV in)	≥ 30 dB
THD	(5 mV in)	≤ 3 %
IF Rejection	(450 kHz)	≤ 36 dB
Image Rejection	(F+2xIF)	≥ 28 dB
Selectivity		≥ 17 dB
Output		110 ± 20 mV
	(00 ID 0(N))	

Loop sensitivity (20 dB S/N)

 999/1000 kHz
  $\leq$  66 dB

 603/600 kHz
  $\leq$  66 dB

 1404/1400 kHz
  $\leq$  66 dB

 (100 - 2.3 kHz, 5 mV)
  $\pm$  6 dB

<u>\*C</u>

≤ 26 dBuv

<u>\*AH</u>

Frequency Response (100 - 2.3 kHz, 5 mV)

## **FM TUNER SECTION**

			<del></del>	
Input level is expressed a	as the reading in open circuit			
of 75-ohm source impeda	ance signal generator			
Usable sensitivity	(98 MHz)		≤ 15 dBuv	≤ 15 dBuv
S/N Ratio	(60 dB, IHF wtd)	Mono	≥ 65 dB	≥ 65 dB
		Stereo	≥ 60 dB	≥ 60 dB
Frequency Response	(20 Hz - 15 kHz, 60 dBm)		0 ± 1.5 dB	$0 \pm 1.5  dB$
Channel Separation	(60 dBm)	100 Hz	≥ 30 dB	≥ 30 dB
		1 Hz	≥ 35 dB	≥ 35 dB
		10 Hz	≥ 20 dB	≥ 25 dB
Alternate Channel Select	ivity (40 dBm, ± 400 kHz)		≥ 60 dB	≥ 45 dB
Capture Ratio	(40 dBm)		≤ 3 dB	≤ 3 dB
AM Suppression (60 dBn	n, 100% Mod. FM, 30% Mod.	AM)	≥ 40 dB	≥ 40 dB
Image Rejection	(119.4 MHz)		≥ 65 dB	≥ 65 dB
I.F. Rejection	(10.7 MHz)		≥ 78 dB	≥ 65 dB
Pilot Suppression	(60 dBm)		≥ 60 dB	≥ 60 dB
THD (60 dBm, L=R 75 kH	Iz for AH, 40 kHz Dev for C)	Mono	≤ 0.8 %	≤ 0.8 %
		Stereo	≤1%	≤ 1 %
Auto-Search Sensitivity		On	≥ 24 dBuv	≥ 24 dBuv
•		Off	≤ 15 dBuv	≤ 15 dBuv

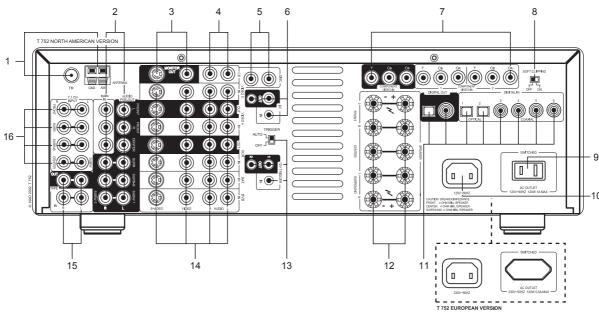
# **PHYSICAL SPECIFICATIONS**

RDS decode Sensitivity

Dimensions (Width x Height x Depth)	435 x 133 x 349 mm
Net Weight	14.40 Kg (31.68 lbs)
Shipping Weight	16.00 Kg (35.20 lbs)

# **REAR PANEL / FRONT PANEL VIEW**

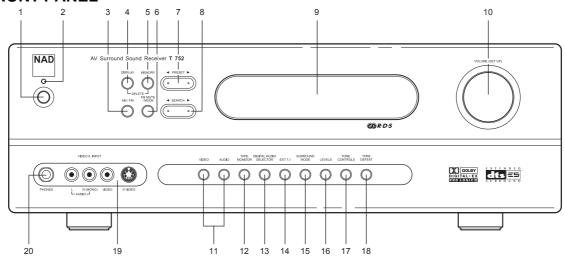
#### **REAR PANEL**



- 1. FM & AM ANTENNA
- 2. MAIN IN / AUDIO PRE-OUTS / SUBWOOFER OUT
- 3. MONITOR OUT
- 4. CD INPUT
- 5. DISC INPUT
- 6. IR INPUT & OUTPUT
- 7. COMPONENT VIDEO IN & COMPONENT VIDEO OUT
- 8. SOFT CLIPPING ON/OFF

- 9. SWITCHED POWER OUTLETS
- 10. AC POWER CORD
- 11. DIGITAL AUDIO INPUTS & DIGITAL AUDIO OUTPUT
- 12. FRONT, CENTER & SURROUND SPEAKERS
- 13. 12V TRIGGER INPUT & OUTPUT
- 14. VIDEO 1 VIDEO 5 (AUDIO & VIDEO)
- 15. TAPE INPUT & OUTPUT
- 16. 7.1 CHANNEL INPUTS

#### **FRONT PANEL**

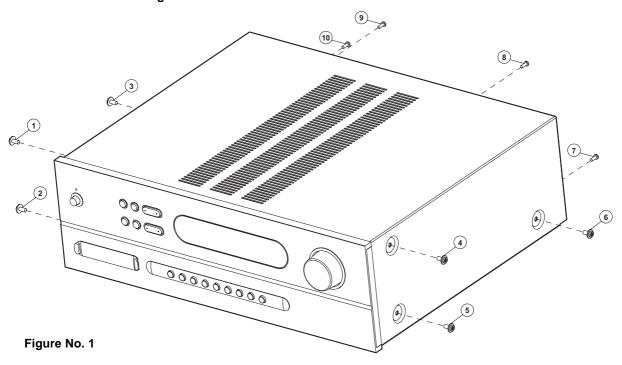


- 1. POWER
- 2. STAND-BY
- 3. AM / FM
- 4. DISPLAY
- 5. MEMORY
- 6. FM MUTE / MONO
- 7. PRESET DOWN / UP
- 8. SEARCH DOWN / UP
- 9. VFL DISPLAY
- 10. VOLUME
- 11. VIDEO & AUDIO
- 12. TAPE MONITOR
- 13. DIGITAL AUDIO SELECTOR
- 14. EXT. 7.1

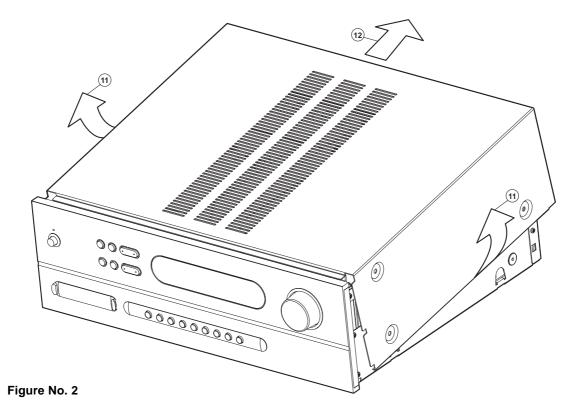
- 15. SURROUND MODE
- 16. LEVELS
- 17. TONE CONTROLS
- 18. TONE DEFEAT
- 19. VIDEO 6 INPUT
- 20. PHONES

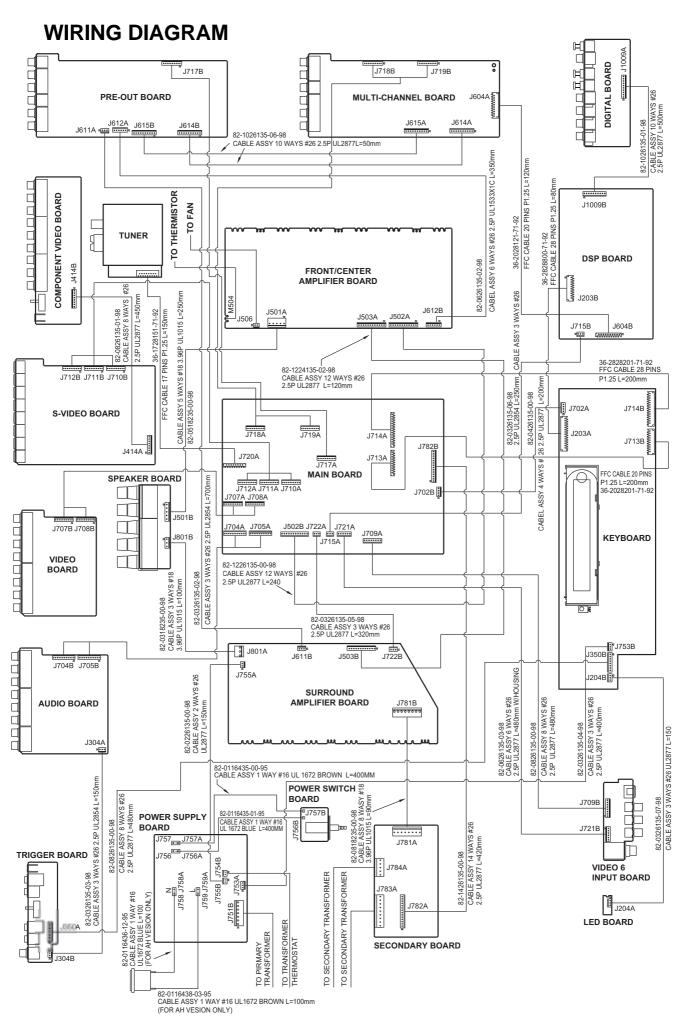
# **DISASSEMBLY INSTRUCTIONS**

Remove machine screws M4.0 x 8.0 (1 to 6) from the side panels.
 Remove tapping screw 3.0 x 8.0 (7 to 10) from the back panel.
 Refer to Figure No. 1.



2. Pull both sides of the TOP COVER slightly outwards 11 and tilt approx. 35 ° and then remove in the direction as indicated by the arrow 12. Refer to Figure No. 2.





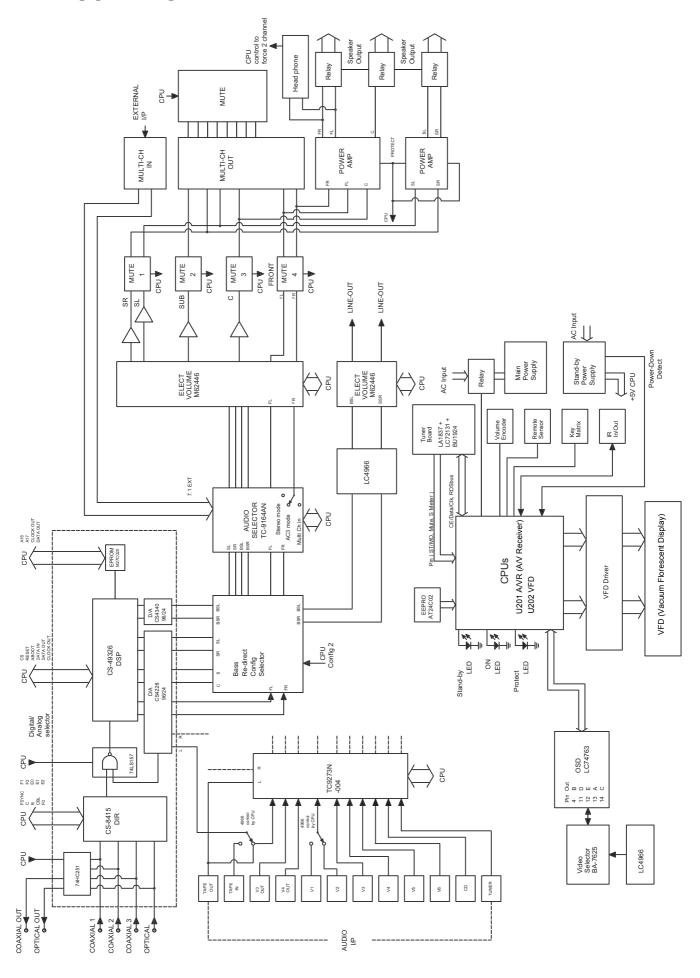
# MODEL: T752

# **CABLE HARNESS CROSS REFERENCE**

Part No.	<u>Description</u>	Location	Start	End
Normal Front and Center Amp Board 82-1224135-02-98 CABLE ASSY	nter Amp Board CABLE ASSY 12 WAYS AWG=26 2.5P UL2877 L=120mm	J503A	FR & C Amp board	Surr Amp Board
Normal Surround Amp Board 82-0318235-03-98 CABL 82-0818235-00-98 CABL	Board   CABLE ASSY 3 WAYS AWG=18 3.96P UL1007 L=180mm   CABLE ASSY 8 WASY AWG=18 3.96P UL1015 L=90mm	J504B J781B	Surr Amp Board Surr Amp Board	FR & C Amp board Secondary Board
Normal Component Video Board 82-0826135-01-98 CABLE A	ideo Board CABLE ASSY 8 WAYS AWG=26 2.5P UL2877 L=450mm	J414B	Component Video Board	S-Video Board
Normal Digital Input Board 82-0426135-02-98 CA 82-1226135-03-98 CA	oard  CABLE ASSY 4 WAYS AWG=26 2.5P UL2877 L=500mm  CABLE ASSY 12 WAYS AWG=26 2.5P UL1533 L=500mm	J1010A J1009A	Digital Input Board Digital Input Board	DSP Board DSP Board
Normal Keyboard 82-0118435-00-98 82-0326135-04-98 82-0426135-00-98	CABLE ASSY 1 WAY AWG18 UL1007 BLACK L=100mm W/ RING TERMINAL CABLE ASSY 3 WAYS AWG=26 2.5P UL2877 L=400mm CABEL ASSY 4 WAYS AWG=26 2.5P UL2877 L=200mm	J201 J753B J702A	Keyboard Keyboard Keyboard	Subfascia Power Supply Board Main Board
Normal LED Board 82-0326135-07-98	CABLE ASSY 3 WAYS AWG=26 UL2877 L=150mm	J204A	LED Board	Keyboard
Normal Main Board 82-0326135-05-98 82-0326135-06-98	CABLE ASSY 3 WAYS AWG=26 2.5P UL2877 L=320mm CABLE ASSY 3 WAYS AWG=26 2.5P UL2854 L=250mm	J722A J715A	Main Board Main Board	Surr Amp Board DSP Board
82-0626135-03-98 82-0826135-00-98 82-1226135-00-98	CABLE ASSY 6 WAYS AWG=26 2.5P UL2877 L=480mm W/HOUSING CABLE ASSY 8 WAYS AWG=26 2.5P UL2877 L=480mm CABLE ASSY 12 WAYS AWG=26 2.5P UL2877 L=240mm	J721A J709A J502B	Main Board Main Board Main Board	Video-6 Board Video-6 Board FR & C Amp board
Normal Speaker Board 82-0318235-02-98 82-0518235-02-95 82-0518235-03-98	d CABLE ASSY 3 WAYS AWG=18 3.96P UL1007 L=120mm CABLE ASSY 5 WAYS AWG=18 3.96P UL1007 L=350mm CABLE ASSY 5 WAYS AWG=18 3.96P UL1007 L=300mm	J801B J786B J501B	Speaker Board Speaker Board Speaker Board	Surr Amp Board Secondary Board FR & C Amp board
Normal Pre-Out Board 82-0326135-02-98 82-0626135-02-98	CABLE ASSY 3 WAYS AWG=26 2.5P UL2 CABEL ASSY 6 WAYS AWG=26 2.5P UL1	J611A J612A	Pre-Out Board Pre-Out Board	Surr Amp Board FR & C Amp board
82-1026135-06-98 82-1026135-06-98	CABLE ASSY 10 WAYS AWG=26 2.5P UL2877L=50mm CABLE ASSY 10 WAYS AWG=26 2.5P UL2877L=50mm	J614B J615B	Pre-Out Board Pre-Out Board	Multi-Channel Board Multi-Channel Board
Normal Power Switch Board 82-0116435-00-95 CABI 82-0116435-01-95 CABI	Board  CABLE ASSY 1 WAYS AWG=16 UL1672 BROWN L=370mm  CABLE ASSY 1 WAYS AWG=16 UL1672 BLUE L=370mm	J757B J756B	Power Switch Board Power Switch Board	Power Supply Board Power Supply Board

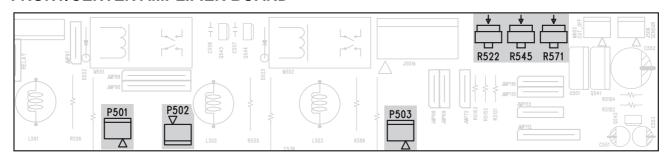
Normal Secondary Board	ard			
82-1426135-00-98	CABLE ASSY 14 WAYS AWG=26 2.5P UL2877 L=420mm	J782A	A Secondary Board	d Main Board
Normal Trigger Board				
82-0326135-03-98	CABLE ASSY 3 WAYS AWG=26 2.5P UL2854 L=150mm	J304B	B Trigger Board	Audio Board
82-0826135-00-98	CABLE ASSY 8 WAYS AWG=26 2.5P UL2877 L=480mm	J350A	A Trigger Board	Keyboard
Normal Video-6 Board				
82-0118435-00-98	CABLE ASSY 1 WAY AWG18 UL1007 BLACK L=100mm W/ RING TERMINAL	P4401	Video-6 Board	Chassis
Casing				
36-1728201-71-26	FFC CABLE 17 PINS P1.25 L=200mm	J720C	C Main Board	Tuner
36-2028121-71-92	FFC CABLE 20 PINS P1.25 L=120mm	J604C	C DSP Board	Multi-Channel Board
36-2028201-71-92	FFC CABLE 20 PINS P1.25 L=200mm	J713C	C Main Board	Keyboard
36-2828201-71-92	FFC CABLE 28 PINS P1.25 L=200mm	J714C	C Main Board	Keyboard
36-2828800-71-92	FFC CABLE 28 PINS P1.25 L=80mm	J203C	C Keyboard	DSP Board
82-0116436-12-95	CABLE ASSY 1 WAY AWG=16 UL1672 BROWN L=100mm	J759	9 AC Outlet	Power Supply Board
82-0116438-03-95	CABLE ASSY 1 WAY AWG=16 UL1672 BLUE L=100mm	J758	3 AC Outlet	Power Supply Board

# **BLOCK DIAGRAM**

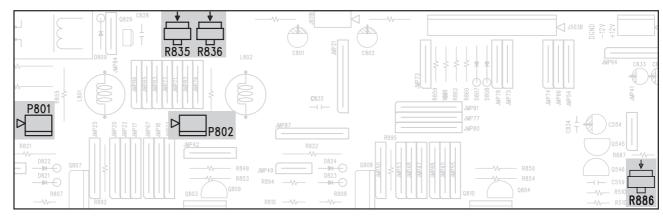


#### ADJUSTMENT POINT DIAGRAM

#### FRONT/CENTER AMPLIFIER BOARD



#### **SURROUND AMPLIFIER BOARD**



#### AMPLIFIER ADJUSTMENT

#### **Idle Current**

- 1. Rotate R522 fully clockwise.
- 2. Connect DC millivoltmeter to P501 (i.e. Across half of R523, 0.22 Ohm resistor).
- 3. Turn on the unit.
- 4. Adjust R522 for 1mV reading on voltmeter.
- 5. Leave power on for at least 5 min, and check for idle current again.
- 6. Repeat for other channels.

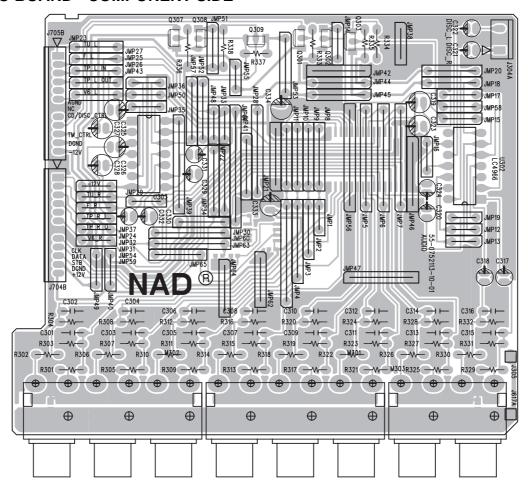
<b>CHANNEL</b>	<u>JUMPER</u>	<u>VR</u>
FL	P503	R571
FR	P502	R545
С	P501	R522
SL	P801	R835
SR	P802	R836

#### **ISC Sensitivity**

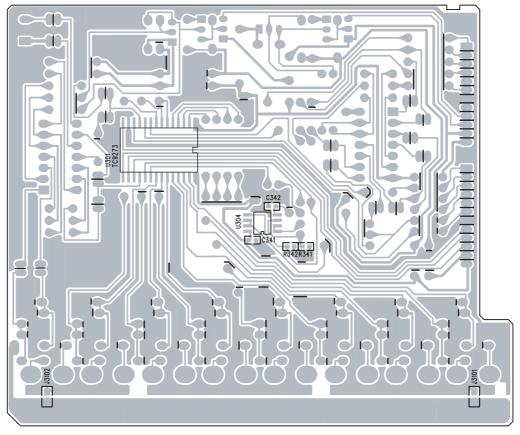
- 1. Connect 8 ohm loading to all channels.
- 2. Rotate R886 fully clockwise.
- 3. Load all channels at full power using 1kHz sine wave.
- 4. At this time, monitor the THD of the output. Clipping should occur before full power achieved.
- 5. Rotate R886 counter-clockwise slowly until the THD just below 0.1%.
- 6. The procedure is finish at this step.
- 7. Load all channels at full power using 1kHz sine wave with 4 ohm load.
- 8. The clipping power(at THD 0.1%) should less than 85W.

## **PCB LAYOUT**

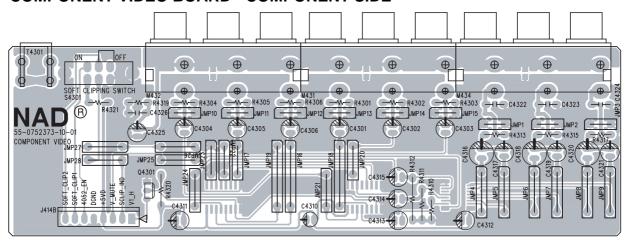
# **AUDIO BOARD - COMPONENT SIDE**



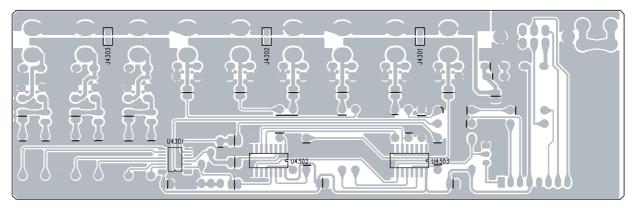
#### **AUDIO BOARD - COPPER SIDE**



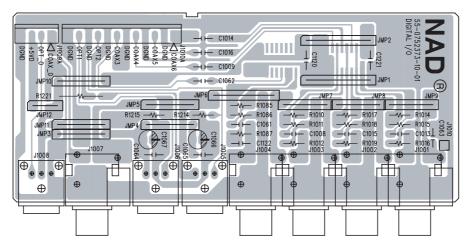
#### **COMPONENT VIDEO BOARD - COMPONENT SIDE**



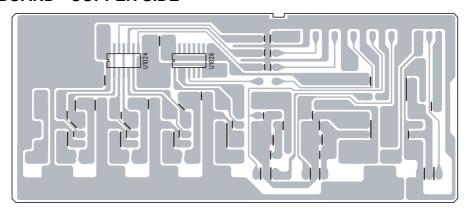
#### **COMPONENT VIDEO BOARD - COPPER SIDE**



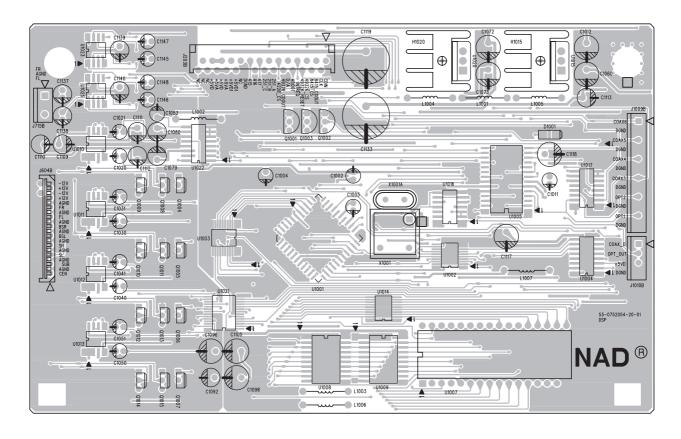
#### **DIGITAL BOARD - COMPONENT SIDE SIDE**



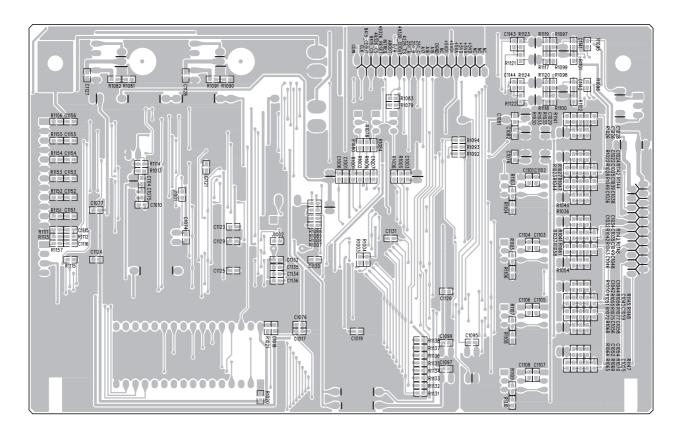
#### **DIGITAL BOARD - COPPER SIDE**



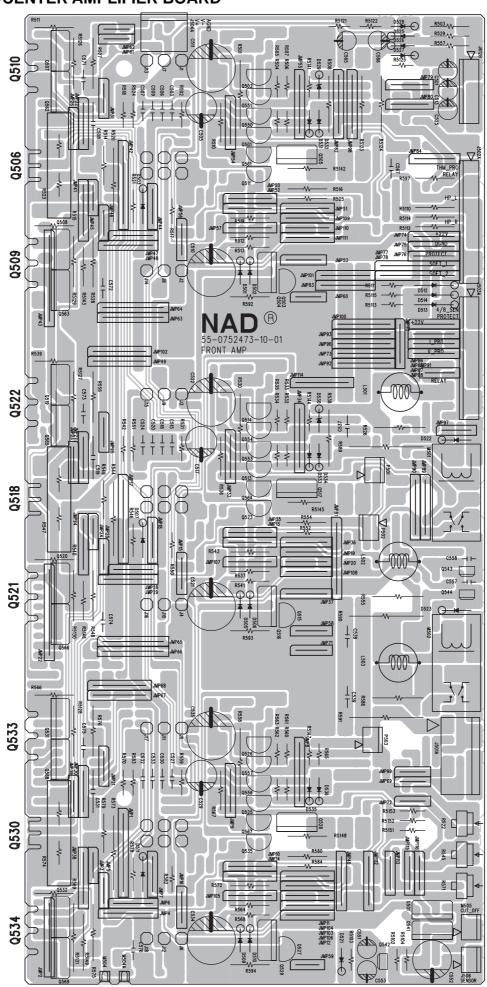
#### **DSP BOARD - COMPONENT SIDE**



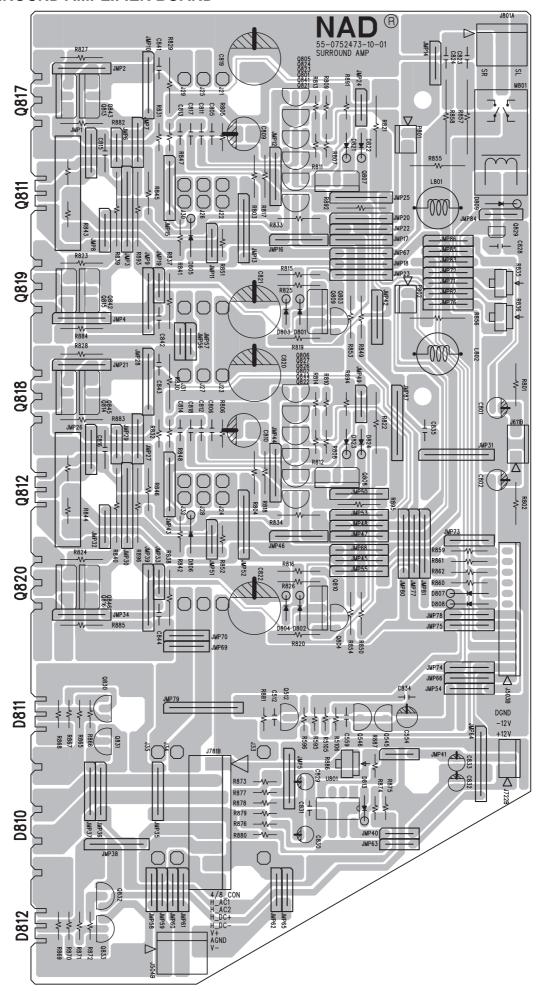
#### **DSP BOARD - COPPER SIDE**



#### FRONT/CENTER AMPLIFIER BOARD

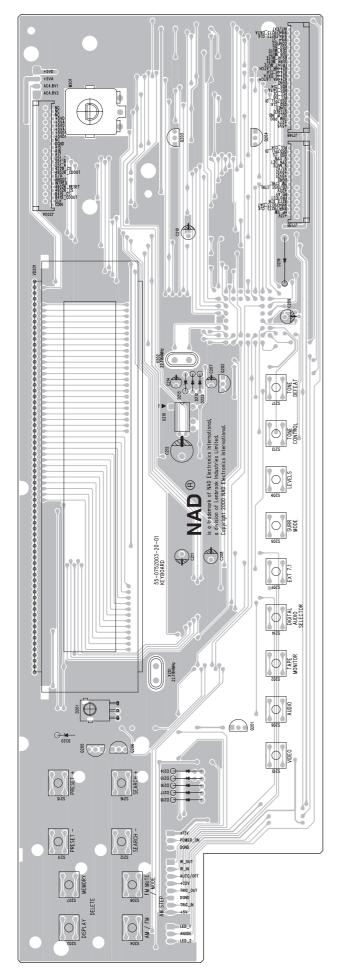


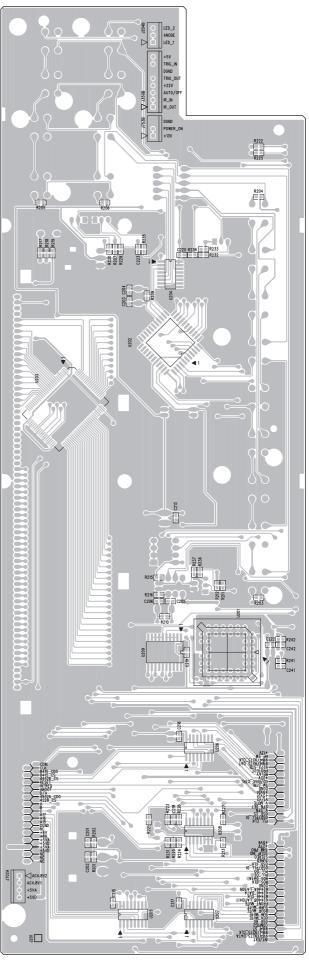
#### **SURROUND AMPLIFIER BOARD**



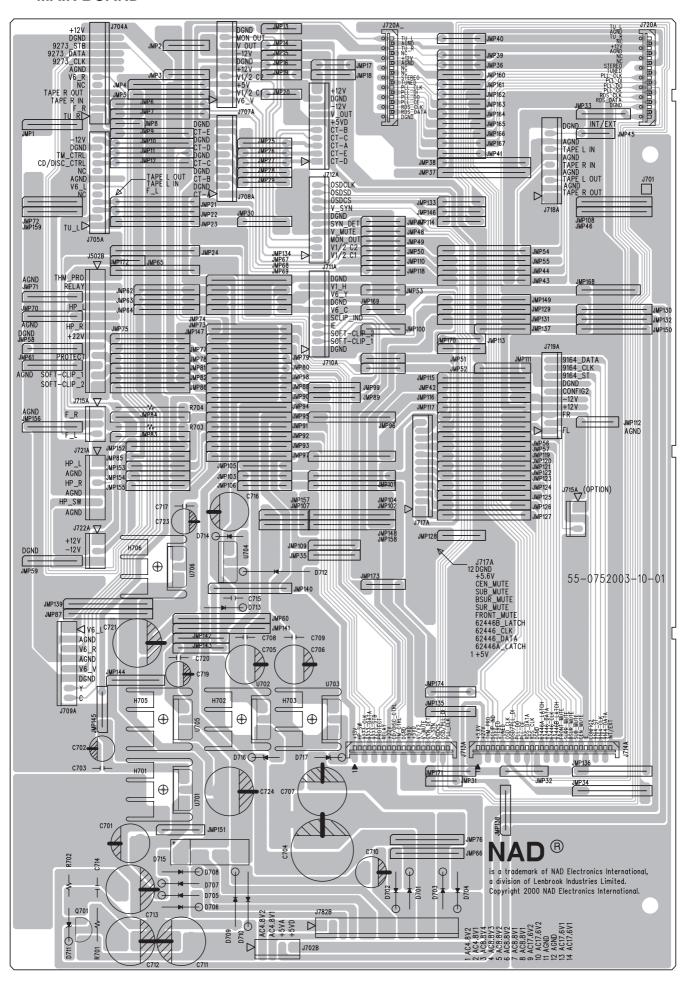
#### **KEY BOARD - COMPONENT SIDE**

#### **KEY BOARD - COPPER SIDE**

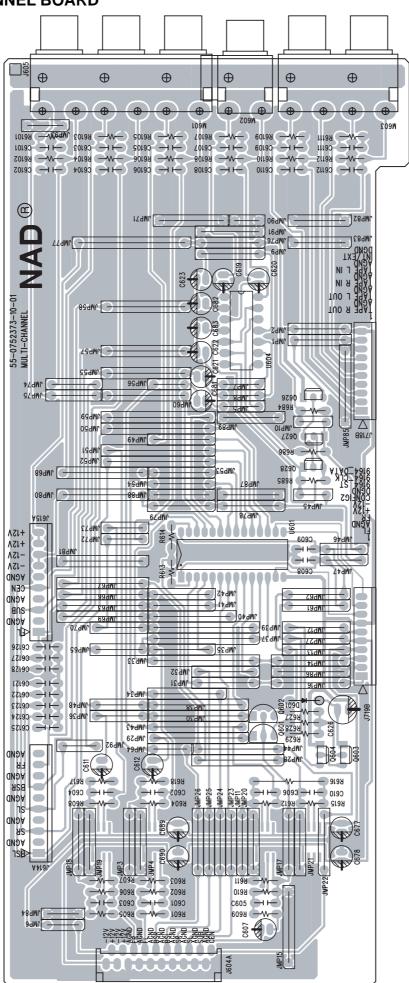




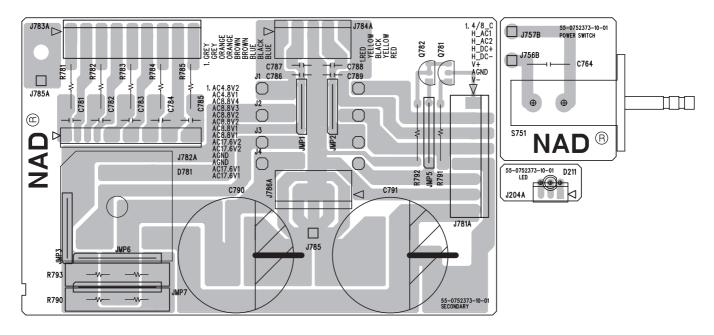
#### **MAIN BOARD**



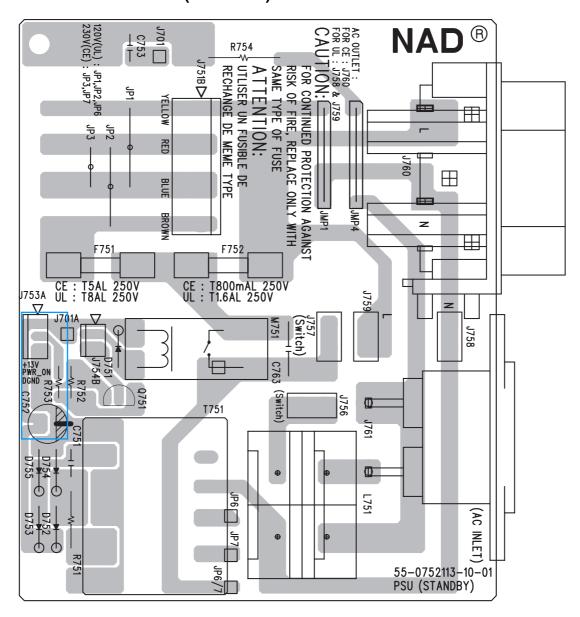
#### **MULTI-CHANNEL BOARD**



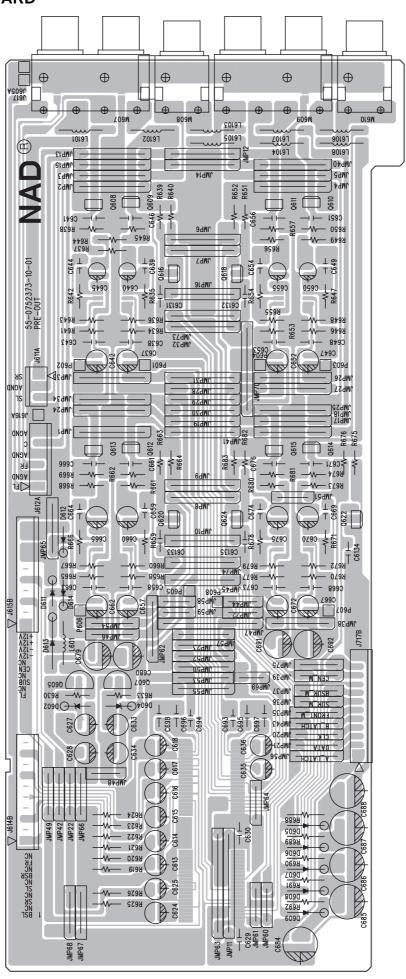
#### SECONDARY/POWER SWITCH/LED BOARD



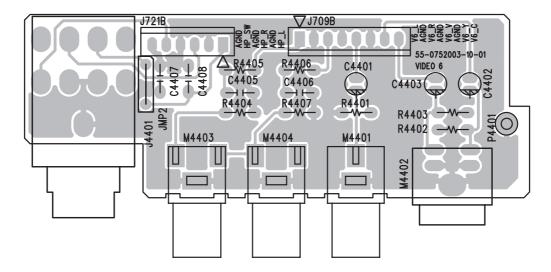
#### **POWER SUPPLY BOARD (STANDBY)**



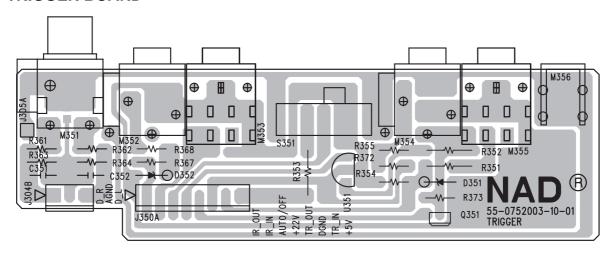
#### **PRE-OUT BOARD**



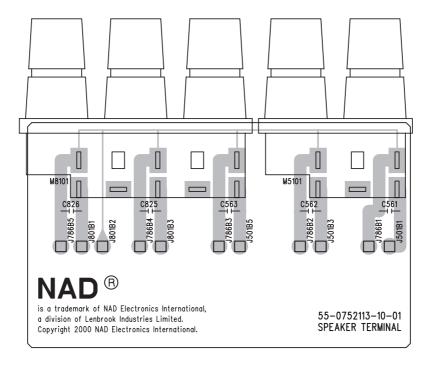
#### **VIDEO 6 BOARD**

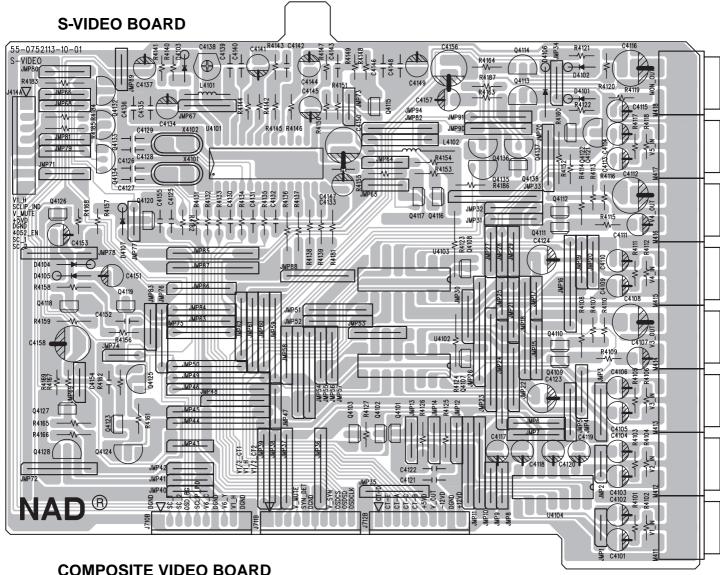


#### TRIGGER BOARD

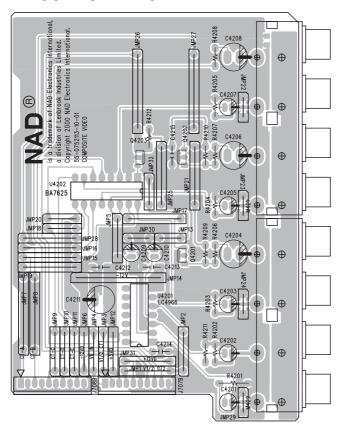


#### **SPEAKER TERMINAL BOARD**

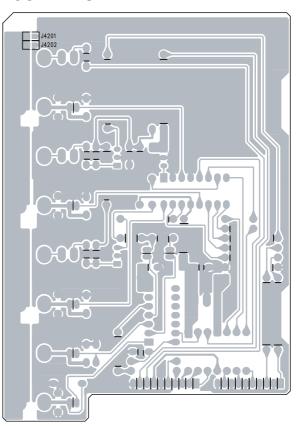




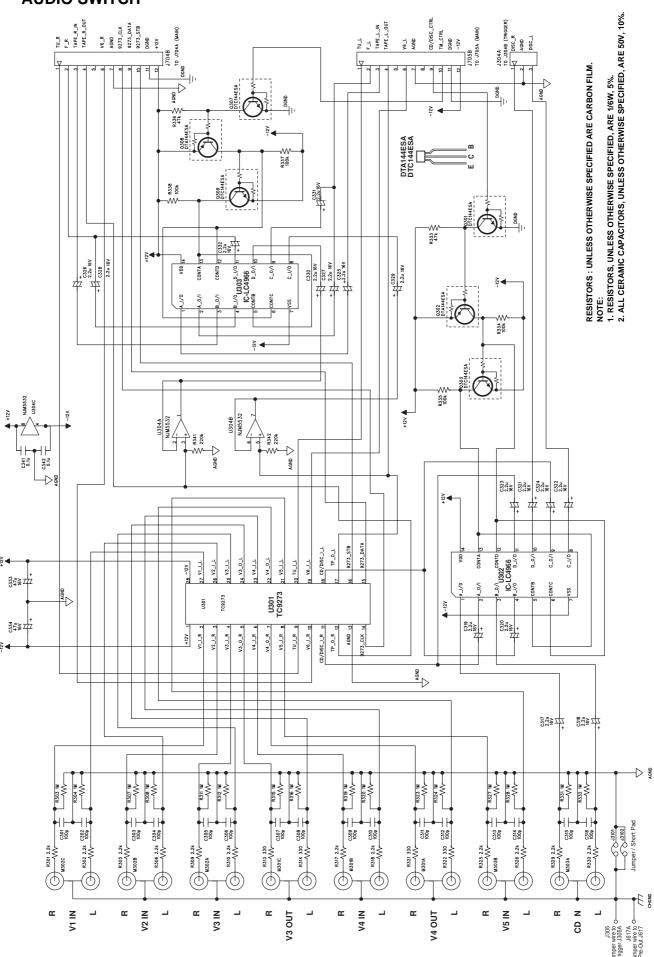
# COMPOSITE VIDEO BOARD - COMPONENT SIDE



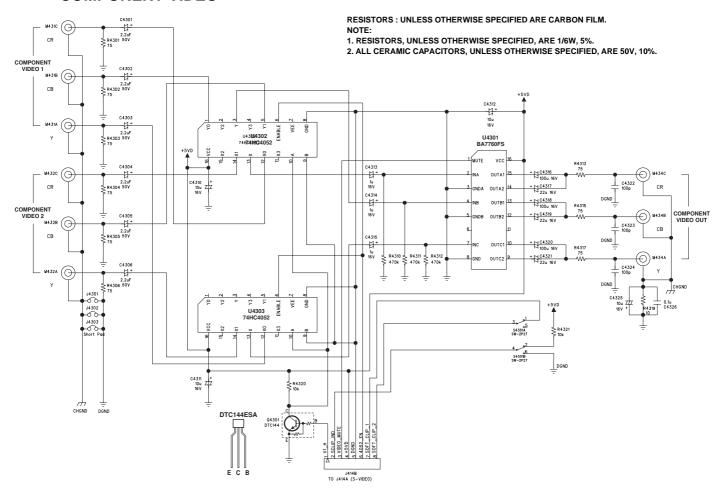
#### - COPPER SIDE



# SCHEMATIC DIAGRAM AUDIO SWITCH



#### **COMPONENT VIDEO**

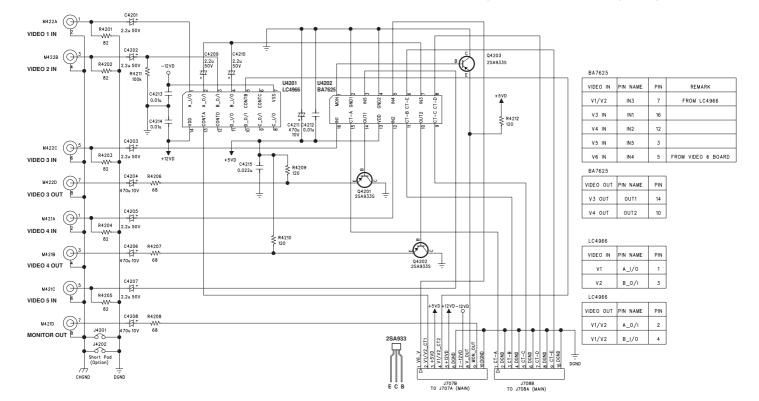


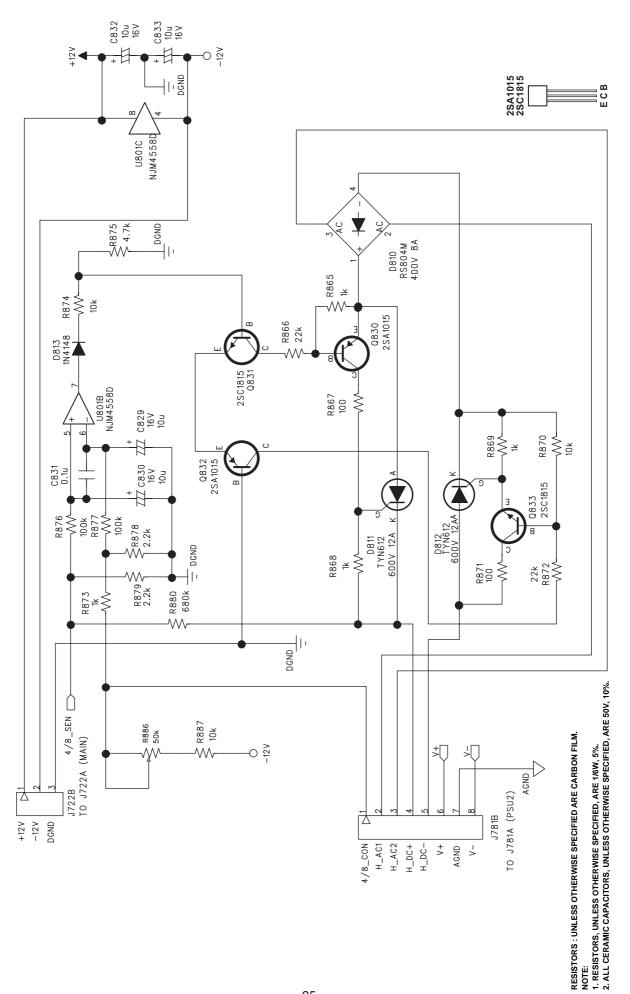
#### **COMPOSITE VIDEO**

RESISTORS: UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.

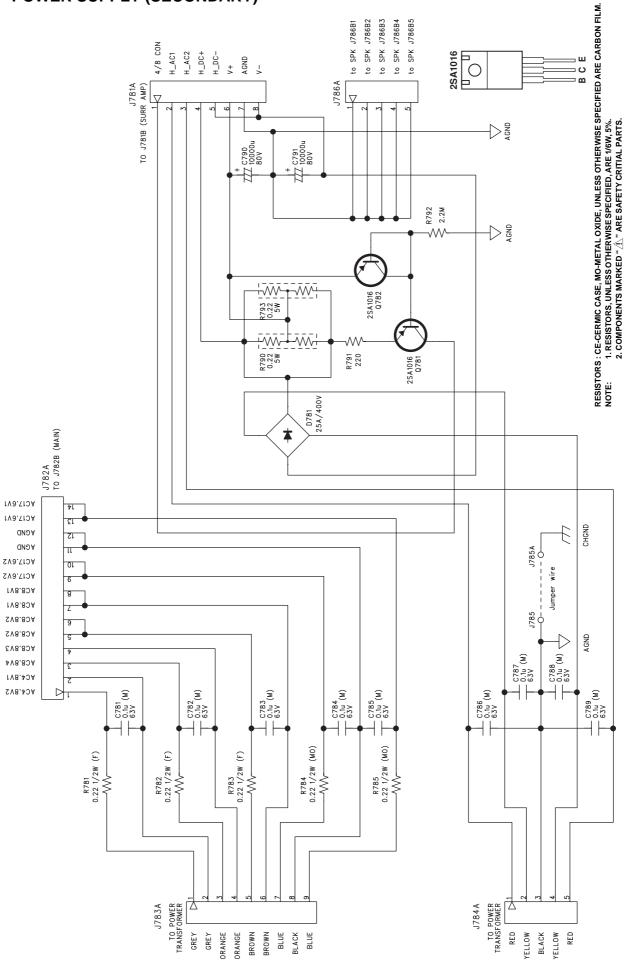
NOTE:

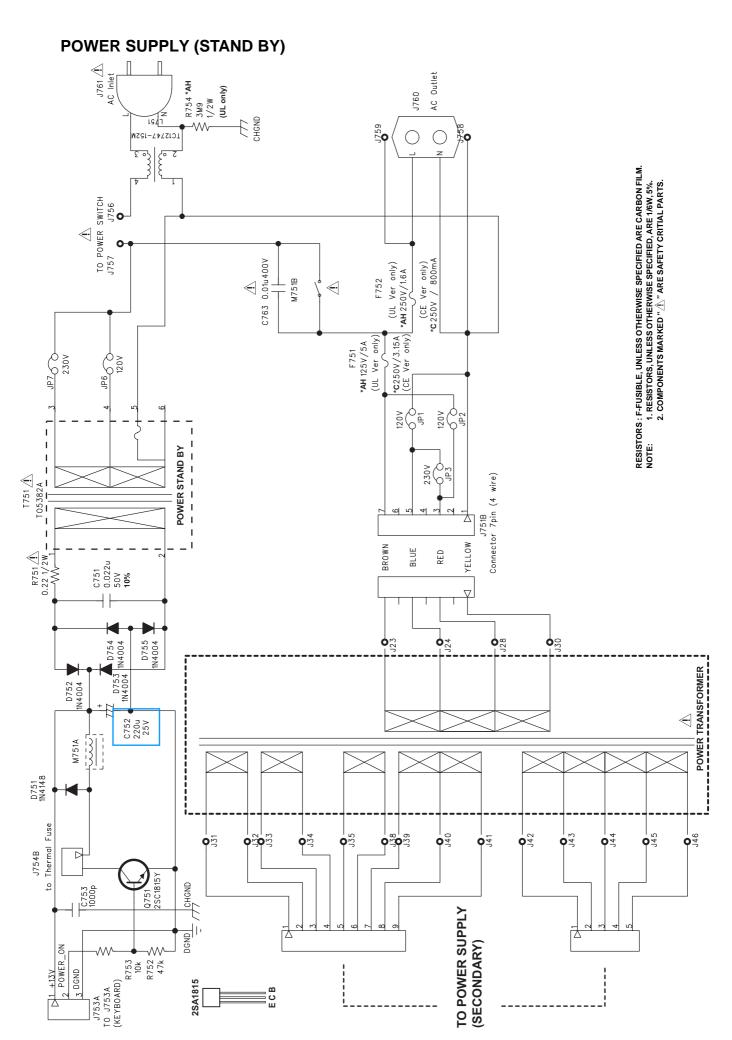
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%. 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

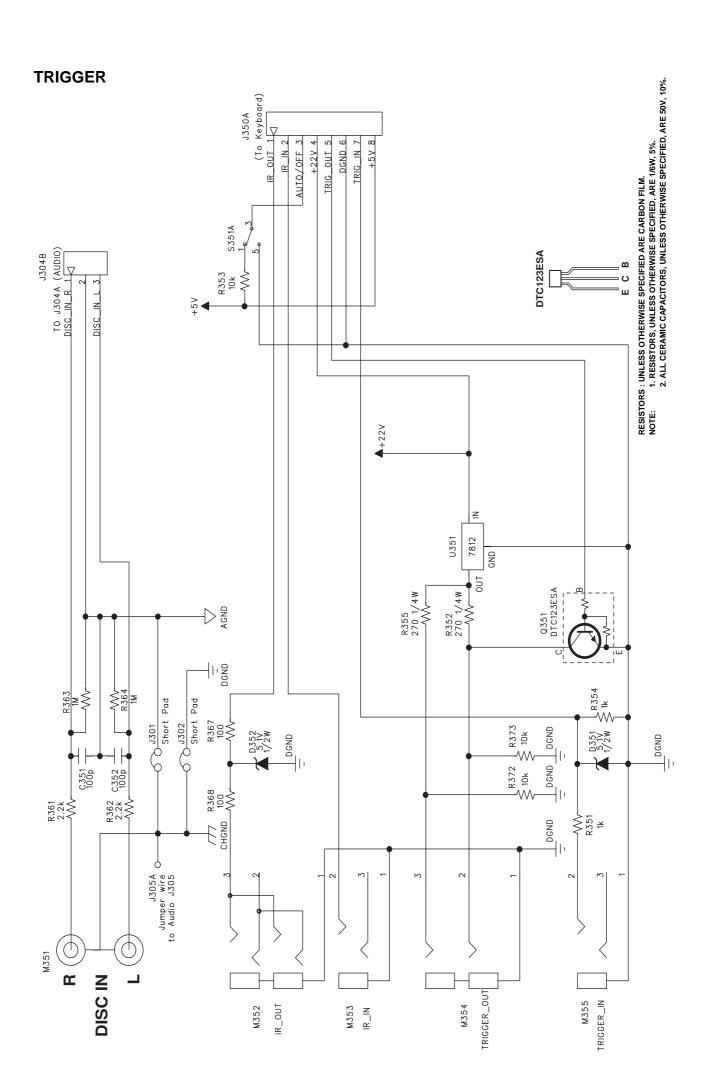




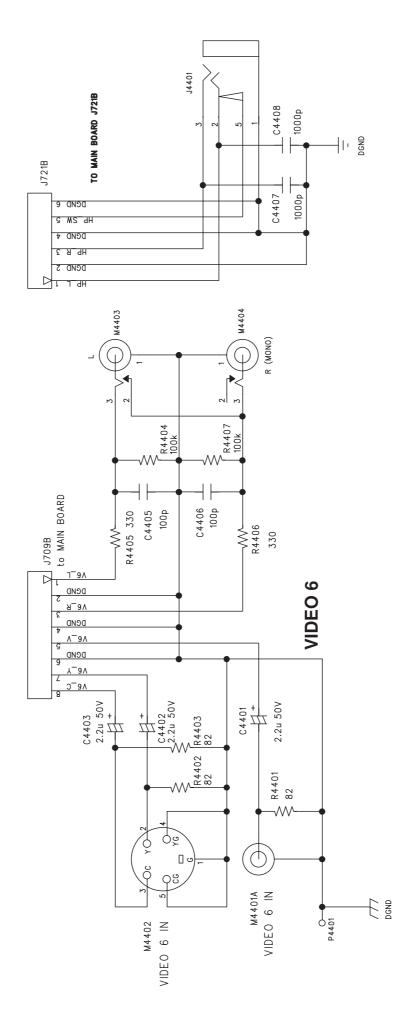
# **POWER SUPPLY (SECONDARY)**



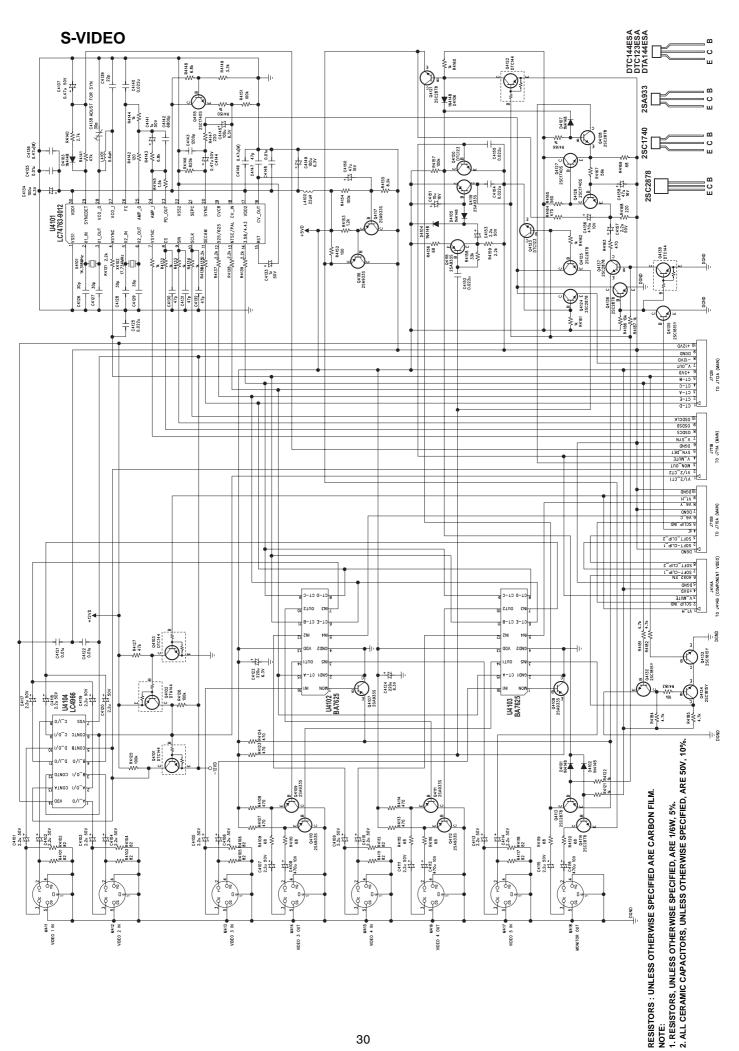


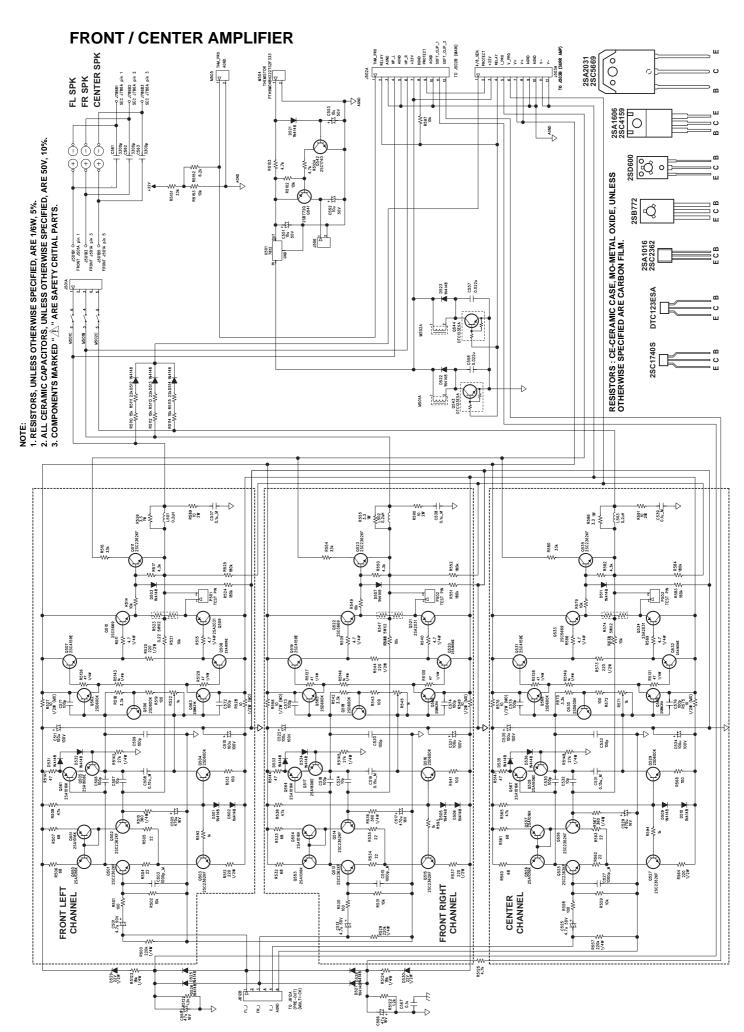


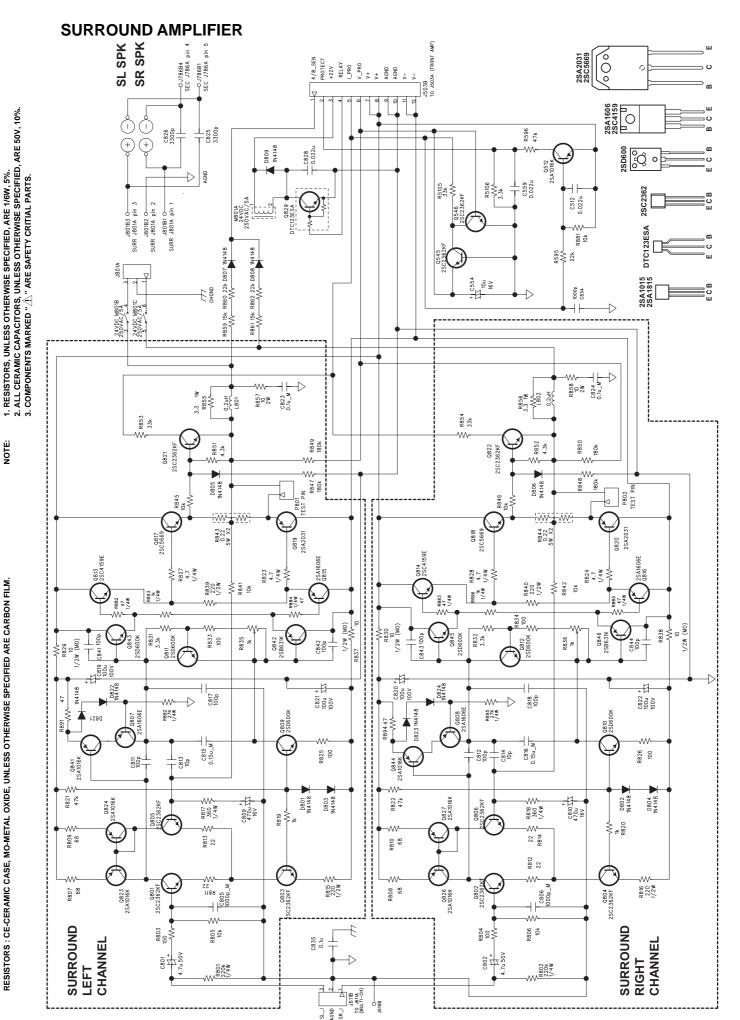
# VIDEO 6



RESISTORS: UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.







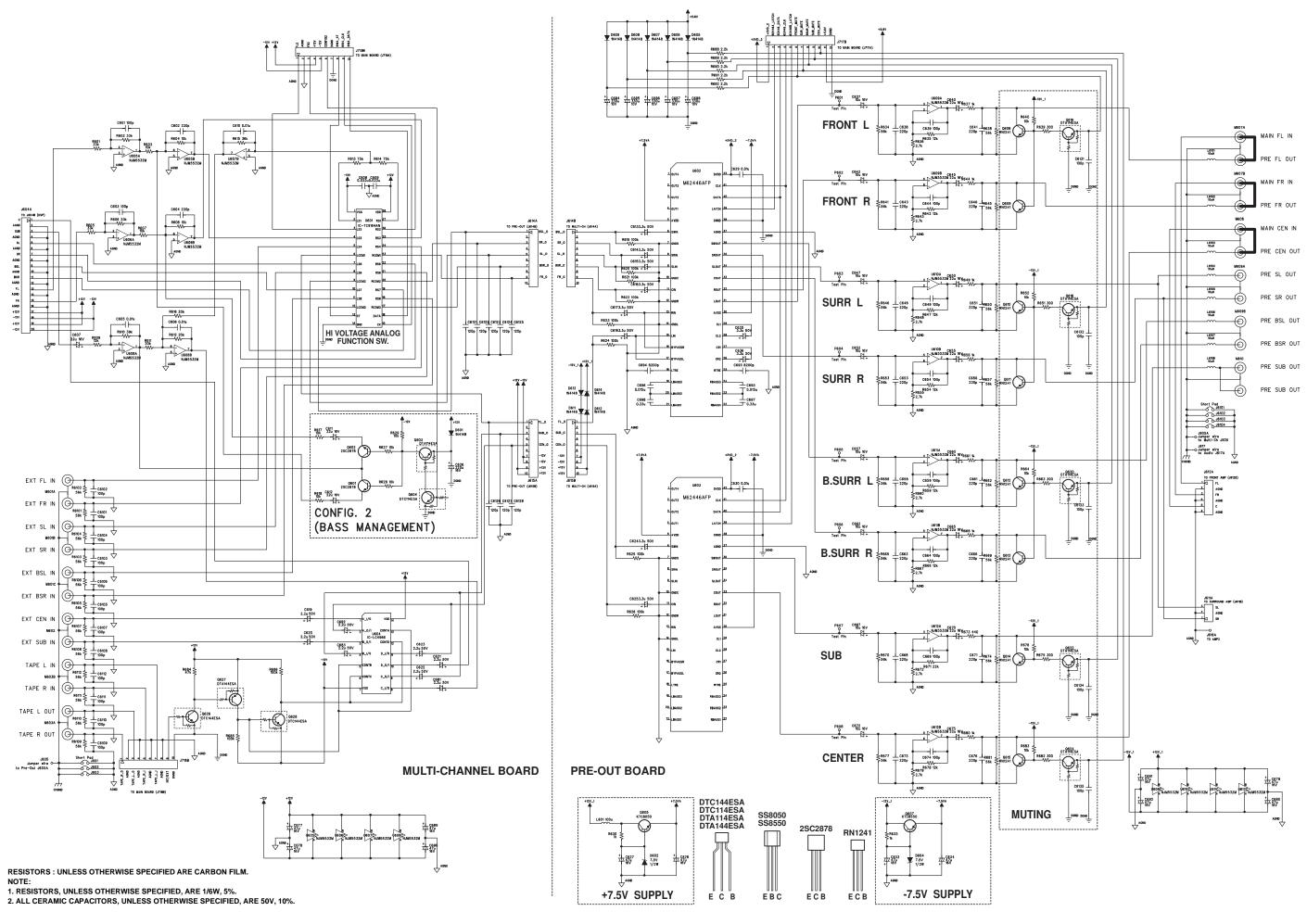
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

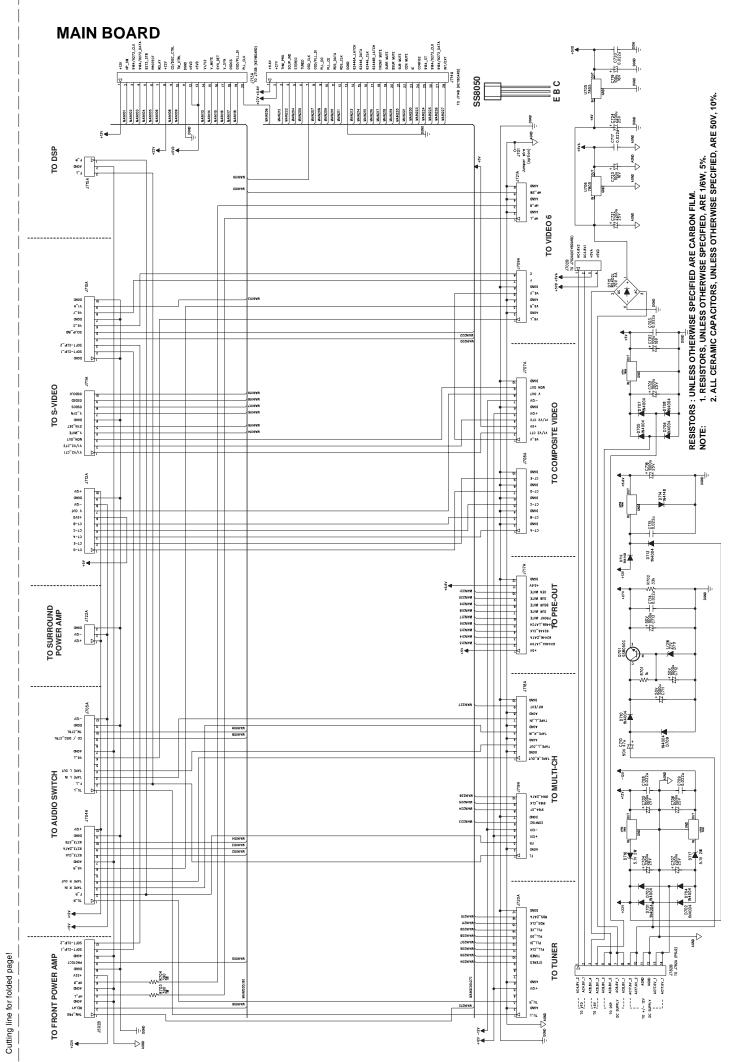
34

1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.

2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 5%.

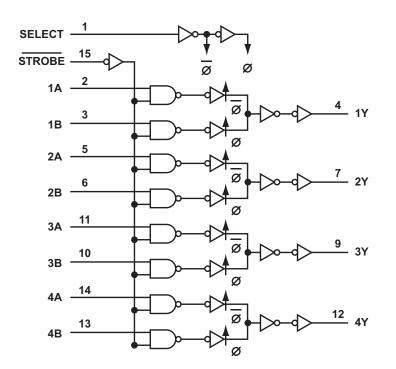
# **MULTI-CH / PRE-OUT**



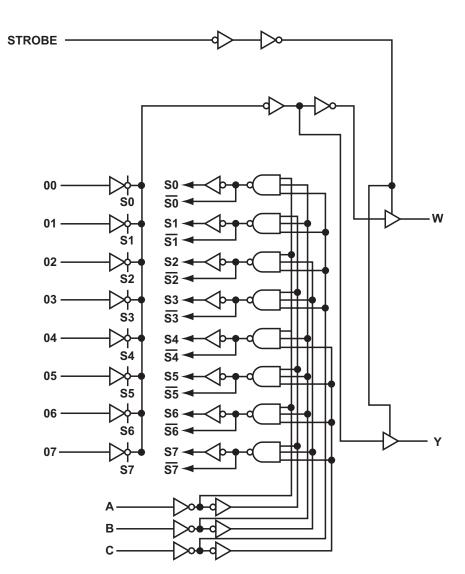


# IC BLOCK DIAGRAM

**74HC157** DSP BOARD: U1004



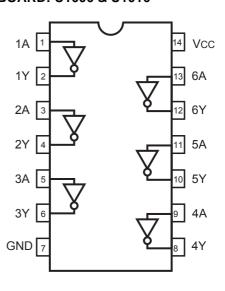
**74HC251** DSP BOARD: U1071



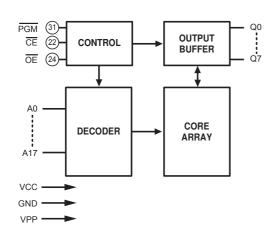
**74LVC245**DSP BOARD: U1002, U1003, U1014

74VHC245 20 VCC DIR KEYBOARD: U209 G A2 В1 A3 4 16 A4 B4 A5 A6 B5 A7 8 B6 A8 9 B7 GND 10 B8

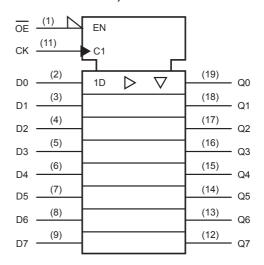
74HCU04 DSP BOARD: U1006 & U1016



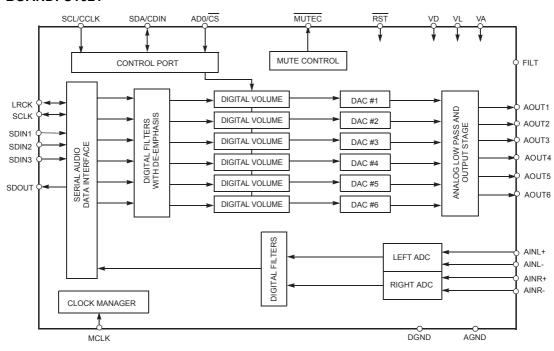
**W27C020**DSP BOARD: U1007



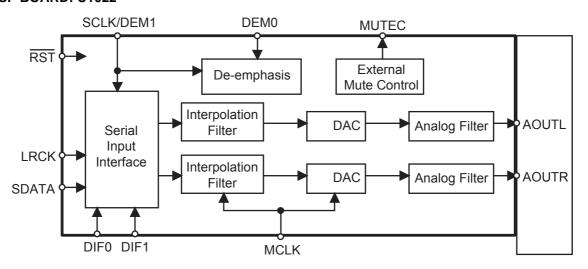
74LVC574 DSP BOARD: U1008, U1009



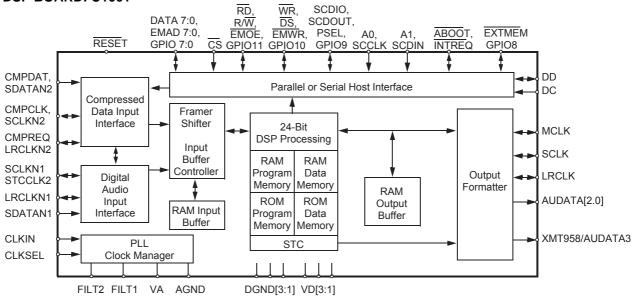
**CS4228**DSP BOARD: U1021



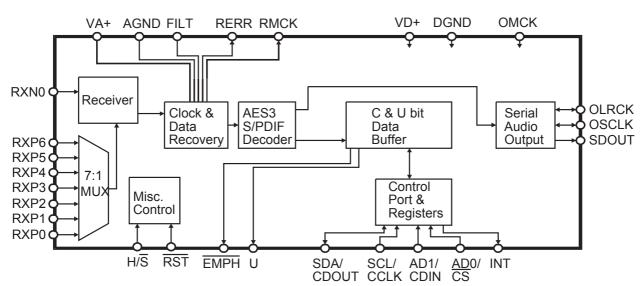
**CS4340**DSP BOARD: U1022



# CS49326 DSP BOARD: U1001



# **CS8415A DSP BOARD: U1005**



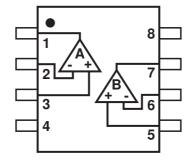
# NJM5532

DSP BOARD: U1010~U1013, U1023 & U1025

MULTI-CHANNEL: U605~U608 PRE-OUT BOARD: U609~U612

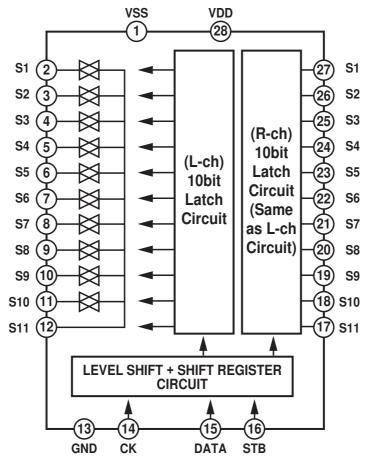
NJM4558D

**SURROUND AMP BOARD: U801** 



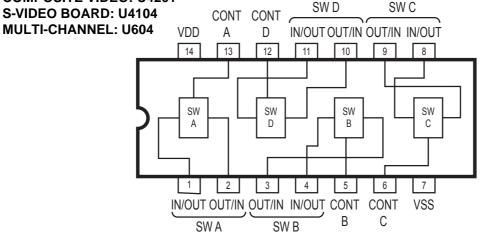
# TC9273

**AUDIO BOARD: U301** 



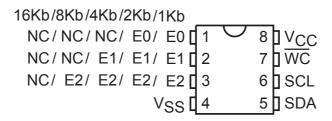
### LC4966

AUDIO BOARD: U302 & U303 COMPOSITE VIDEO: U4201

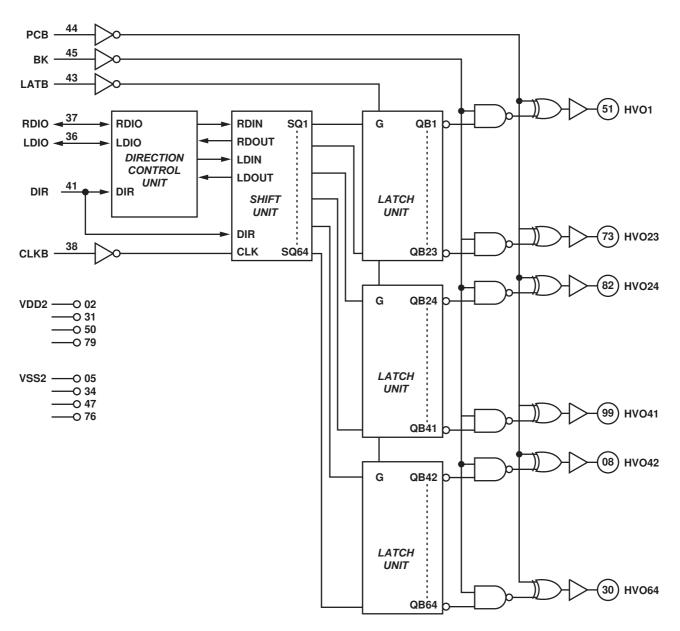


M24C16 KEYBOARD: U210

M24Cxx

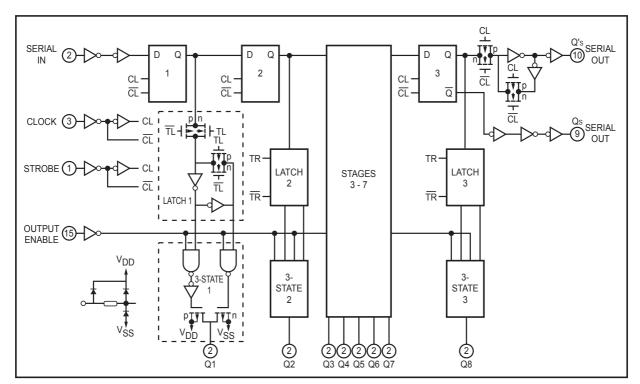


PT6306 KEYBOARD: U203

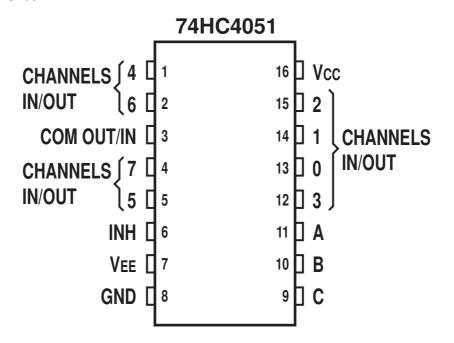


# **HCF4094B**

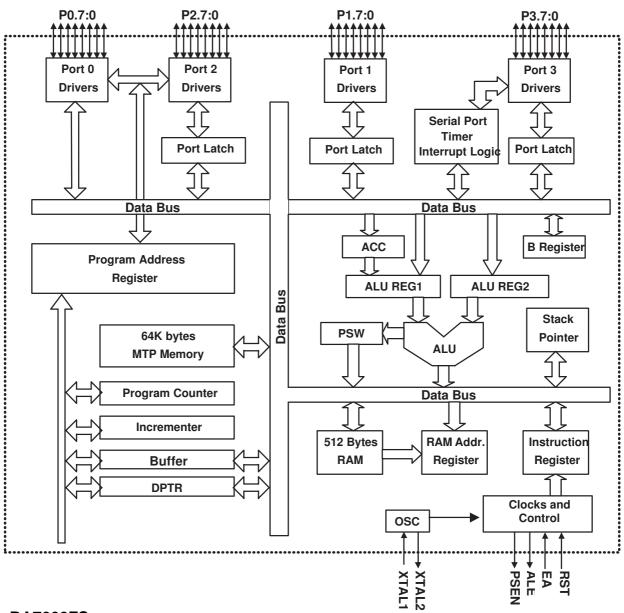
KEYBOARD: U204~U207



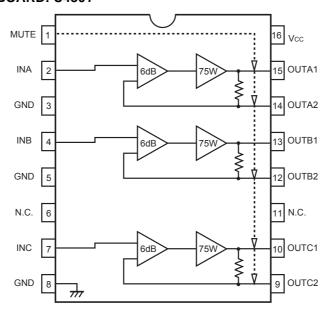
# **74HC4051** KEYBOARD: U208



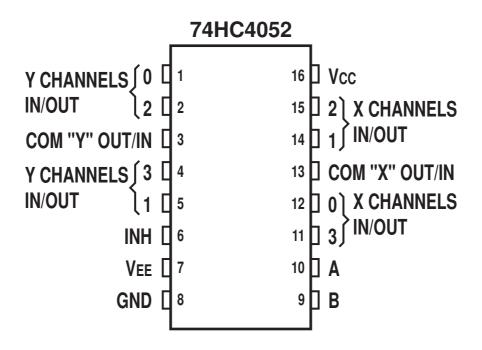
M6759 KEYBOARD: U201 & U202



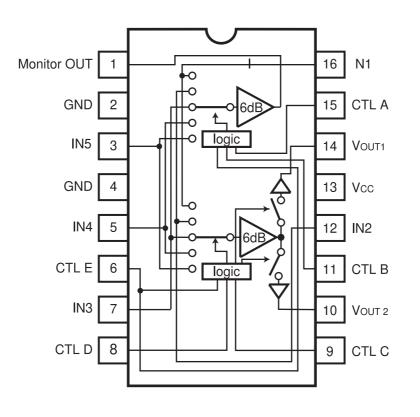
BA7660FS COMPONENT VIDEO BOARD: U4301



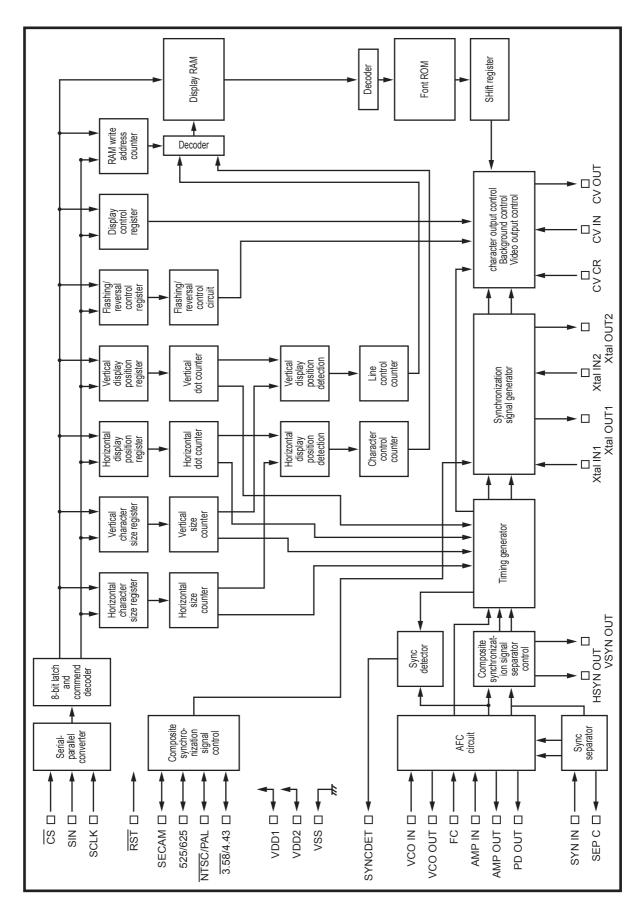
74HC4052 COMPONENT VIDEO BOARD: U4302 & U4303



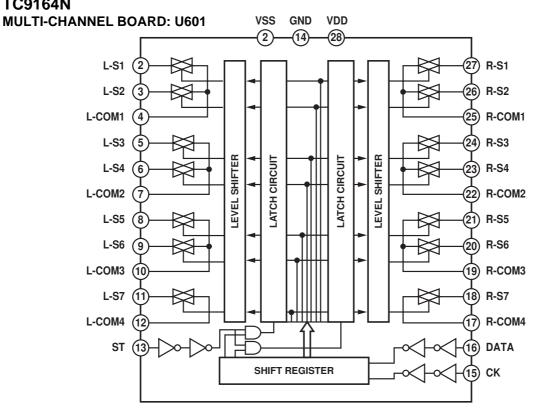
BA7625 COMPOSITE VIDEO BOARD: U4202 S-VIDEO BOARD: U4102 & U4103



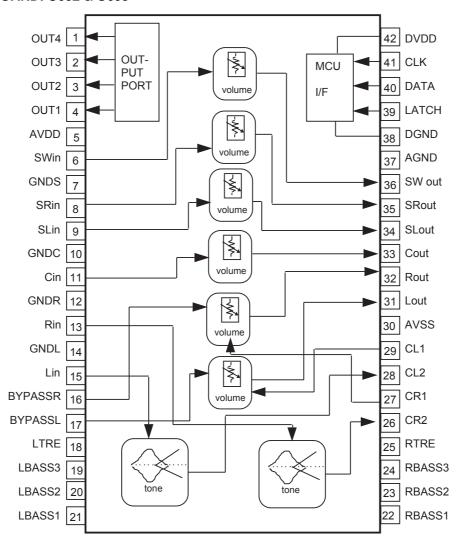
LC74763 S-VIDEO BOARD: U4101



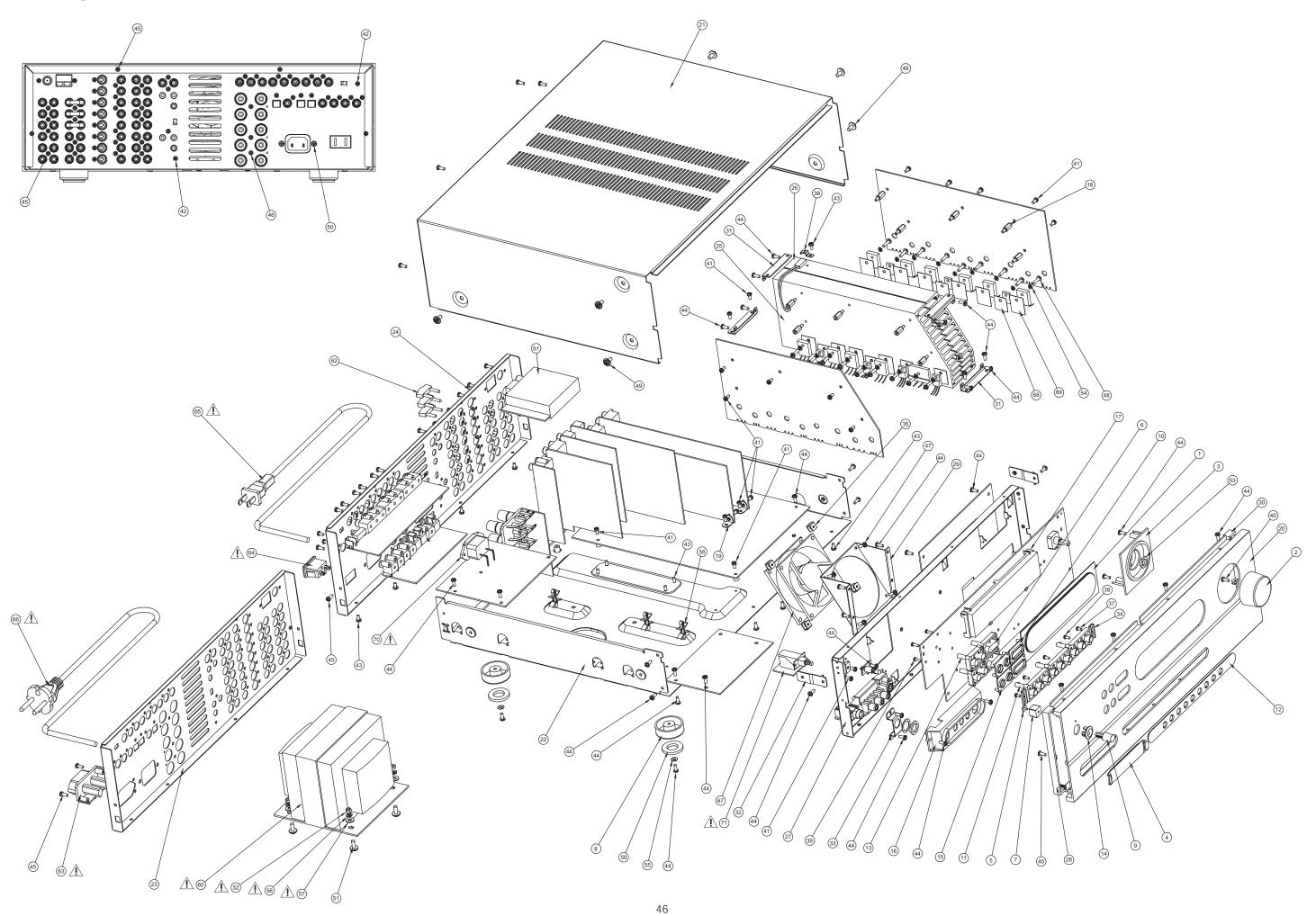
# **TC9164N**



M62446FP **PRE-OUT BOARD: U602 & U603** 



# **EXPLODED VIEW**



# **EXPLODED VIEW PARTS LIST**

<u>ltem</u>	Part No.	Description	Qty.
1	10-0752001-00-10	WINDOW LENS	1
2	10-0752002-71-00	VOLUME KNOB ASSEMBLY	1
3	10-0752005-71-00	VOLUME BEZEL	1
4	10-0752007-01-00	VIDEO COVER	1
5	10-0752011-00-00	LED LENS	1
6	10-0752012-01-00	RACKER BUTTON	2
7	10-0752015-01-00	LED BEZEL	1
8	10-0752017-01-00	PLASTIC FOOT	4
9	10-0752022-01-00	POWER BUTTON	1
10	10-0752025-01-00	RACKER BEZEL	2
11	10-0752032-01-00	INPUT BUTTON	3
12	10-0752035-71-00	INPUT BUTTON LOZENGE	1
13	10-0752042-01-00	DUO BUTTON	2
14	10-0752045-01-00	POWER BUTTON BEZEL	1
15	10-0752055-01-00	DUO BEZEL	2
16	10-0752065-01-00	VIDEO HOUSING	1
17	10-0752075-01-00	DISPLAY BRACKET	1
18	11-0570065-20-00	HEX SPACER	10
19	11-0570075-80-00	L BRACKET	2
20	11-0752000-95-10	FASCIA	1
21	11-0752003-85-10	TOP COVER	1
22	11-0752004-80-00	BOTTOM CHASSIS	1
23*C	11-0752006-94-10	REAR PANEL (C)	1
24*AH	11-0752006-94-10	REAR PANEL (AH)	1
25	11-0752008-80-00	EXTRUDED HEATSINK L	1
26	11-0752018-80-00	EXTRUDED HEATSINK R	1
27	11-0752015-80-00	SUBFASCIA	1
28	11-0752028-95-00	SIDE CAP L	1
29	11-0752025 35 00	FAN MOUNTING BRACKET	1
30	11-0752038-95-00	SIDE CAP R	1
31	11-0752045-80-00	HEATSINK MOUNTING BRACKET	4
32	11-0752055-80-00	SIDE MOUNTING BRACKET	2
33	11-0752065-80-00	PHONE BRACKET	1
34	11-0752005-80-00	DUMMY BRACKET	2
35	11-1500005-80-00	U-BRACKET	4
36	11-2100135-80-00	CLIP THERMAL SWITCH	1
37	13-0260500-02-00	SCREW 2.6 X 5 NI-PLT	2
38	13-0260600-02-00	SCREW 2.6 X 6 NI-PLT	6
39	13-0260803-02-00	SCREW 2.6 X 8 NI-PLT	14
	13-0300803-04-00		
40		SCREW 3.0 X 8 NI-PLT	2
41	14-0300600-02-00	SCREW M3 X 6 NI-PLT	21
42	14-0300600-04-00	SCREW M3 X 6 BLK-PLT	2
43	14-0300600-52-00	SCREW 3.0 X 6 NI-PLT	10
44 45*C	14-0300800-53-00	SCREW 3.0 X 8 ZINC-PLT	47
45*C	14-0300800-54-00	SCREW 3.0 X 8 BLK-PLT	54
45*AH	14-0300800-54-00	SCREW 3.0 X 8 BLK-PLT	52
46 47	14-0301000-54-00	SCREW 3.0 X 10 BLK-PLT	3
47	14-0301003-04-00	SCREW M3 X 10 BLK-PLT	4
48	14-0301203-02-00	SCREW M3 X 12 NI-PLT	18
49	14-0400802-04-00	SCREW M4 X 8 BLK-PLT	6
50	14-0400803-44-00	SCREW 4.0 X 8 BLK-PLT	2

<u>ltem</u>	Part No.	Description	Qty.
51	14-0401002-04-00	SCREW M4 X 10 BLK-PLT	4
52	15-0400320-07-20	NUT M4 X 3.2	4
53	15-0900220-11-30	NUT M9 X 2.2	1
54	16-0320560-09-20	SPRING WASHER	18
55	16-0350080-04-35	STEEL WASHER	4
56	16-0400074-10-31	SPRING WASHER	4
57	16-0400100-08-25	STEEL WASHER	4
58	17-0500960-00-01	PCB SUPPOT H=9.6MM	3
59	17-1402600-30-22	RUBBER FOOT	4
60 🛕	25-0220054-30-18	POWER TRANSFORMER EI-114 115/230V	1
61*C <u></u>	29-4000002-00-38	AM/FM TUNER MODULE KST-MB114MA-1-20	1
61*AH <u> </u>	29-4000003-00-38	AM/FM TUNER MODULE KST-MB114MA-1-22	2
62	34-0061030-00-60	JUMPER PLUG	3
63*C <u>(1</u>	34-0100002-00-78	AC OUTLET (C)	1
64*AH <u>∕</u> !\	34-0101001-00-70	AC OUTLET (AH)	1
65*AH <u>∕</u> 1.	36-2061010-07-94	POWER CORD UL/CSA SPT-2 AWG 18X2	1
66*C <u>(1</u>	36-2283110-07-96	POWER CORD EURO-PLUG 10A/250V	1
67	37-2011225-00-63	FAN	1
68	38-1001500-00-65	SILICONE RUBBER	7
69	38-1030100-00-65	MICA 1.5KV 22 X 27 X 0.125MM	10
70 🛕	34-0100002-00-70	AC INLET IEC 2 PIN 10A/250V	1
71 🛕	35-0101109-00-67	POWER SW TV-8 10A 250V	1

# NOTE:

THE COMPONENTS IDENTIFIED BY  $\hat{\underline{\Lambda}}$  MARK ARE CRITICAL FOR RISK OF FIRE AND ELECTRICAL SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

<\*AH > : USA, CANADIAN MODEL ONLY. <\*C > : EUROPEAN MODEL ONLY.

# **ELECTRICAL PARTS LIST**

Reference No.	Part No.	<u>Description</u>
FRONT AND CENTER AMPLIFIER BOARD PCB ASSEMBLY	80-0907520-40-00	FRONT AND CENTER AMP ASSEMBLY
SURROUND AMPLIFIER BOARD PCB ASSEMBLY	80-0907520-18-00	SURROUND AMP ASSEMBLY
DSP BOARD PCB ASSEMBLY	80-0907520-65-00	DSP ASSEMBLY
AUDIO BOARD TRANSISTORS		
Q301,Q303,Q307,Q309	21-0000120-70-14	XTR NPN HFE 68 30MHz SPT DTC144ES
Q302,Q308	21-0000450-70-14	XTR PNP 68 250MHz SPT DTA144ESA
CAPACITORS		
C317-C332	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20%
C333-C334	22-3470022-00-43	CAP ELEC SS 47uF 16V 20%
ics		
U301		I.C. ANALOG SW SMD TC9273F-004
U302,U303 U304		I.C. QUAD BILATERAL SWITCH LC4966 I.C. AUDIO LOW NOISE OP-AMP SMD NJM5532M
RCA JACKS		
M303	34-4040420-00-60	RCA JACK 4 R-R/W-W GOLD RS-453G-04
M301-M302	34-4060420-00-60	RCA JACK 6 R-R-R/W-W-W GOLD RCA-653D-04
COMPONENT VIDEO BOARD TRANSISTOR		
Q4301	21-0000120-70-14	XTR NPN HFE 68 30MHz SPT DTC144ES
CAPACITORS		
C4301-C4306		
C4310-C4312,C4325		CAP ELEC SS 10uF 16V 20%
C4313-C4315 C4316,C4318,C4320		CAP ELEC SS 1uF 50V 20% CAP ELEC SS 100uF 16V 20%
C4317,C4319,C4321		CAP ELEC SS 1000F 16V 20%
ICS		
U4301	27-5176600-18-23	I.C. VIDEO 3-CH 75 OHM DRIVER BA7660FS
U4302-U4303	27-0140520-18-00	I.C. SINGLE DUAL TRIPLE M74HC4052MIR

Reference No.	Part No.	<u>Description</u>
RCS JACKS		
M431-M432,M434	34-4032020-00-60	RCA 3 G-BL-R GOLD RS-354G-18
SWITCH		
S4301	35-4102209-00-67	SW SLIDE 2P2T JSK022N09-G09
DIGITAL BOARD		
FIBRE OPTICAL		
J1008	26-6691386-00-16	FIBRE OPTIC TRANSMITTER GP1FA550TZ
J1005-J1006	26-6701380-01-16	FIBRE OPTIC RECEIVING UNIT GP1FA550RZ
CAPACITORS		
C1066, C1067	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20%
IC		
U1024, U1026	27-0804990-18-00	I.C. HEX INVERTER M74HCU04MIR
RCA JACKS		
J1001-J1004,J1007	34-4010320-00-60	RCA JACK 1 BLACK GOLD RS-146G/B
KEYBOARD		
DIODES		
D212,D214-D218	20-0000000-00-13	DIODE SW 4NS DO35 IN4148
D213	20-3262902-00-01	DIODE ZENER BZX55 6.2V 1/2W 5%
D219 D220	20-1001401-20-44 20-3251902-00-01	DIODE RECT 1A/400V D041 1N4004 DIODE ZENER BZX55 5.1V 1/2W 5%
TRANSISTORS	01 0000010 00 46	XTR NPN HEF 100 200MHz C1815Y
Q202-Q206	21-0000010-00-46	XIR NPN HEF 100 200MH2 C1815Y
CAPACITORS		
C203-C206		CAP CER SMD 10pF 50V 5%
C207,C214		CAP ELEC SS 10uF 16V 20%
C208-C211		CAP ELEC SS 47uF 16V 20%
C212		CAP ELEC GR 1000uF 10V 20% CAP CER SMD 0.1uF 50V 20%
C201, C202, C213, C215-C220 C222, C241, C242		CAP CER SMD 0.10F 50V 20%  CAP CER SMD 1nF 50V 10%
C223		CAP CER SMD 1nF 50V 10%
IR		
D201	26-0941380-00-00	IR RX 940nm 37.9KHz SHIELD ST
		FM-7138TE5
ICS U201(A/V-R)-U202(VFD)	27-1086400-04-87	I.C. MCU 8 BIT 64KROM 512 BYTE M6759 (sold as a pair)
U203	27-9630600-14-62	I.C. VFD DRIVER PT6306
U204-U207		I.C. 8-STAGE BUS REGISTER HCF4094BM1

Reference No.	Part No.	<u>Description</u>
U208	27-0140510-18-00	I.C. MUX/DEMUX M74HC4051MIR
U209	27-0324591-18-00	IC OCTAL BUS TRANSCEIVER 74VHC245M
U210	27-2300225-00-00	I.C. EEPROM 2K BYTE 250nS M24C16-BN6
CRYSTAL		
X201-X202	28-5221200-06-19	CRYSTAL 22.1184MHZ 30ppm HC-49S
IC SOCKET		
U201A	34-6244000-00-79	IC SOCKET PLCC 44 FT
TACT SWITCHES		
S201-S217	35-1001117-00-67	SW TACT 1PIT 50mA/12V TM114BFJ
ENCODER		
M201	35-6001219-00-08	ENCODER ROTATRY L=20mm W/O CLICK ECB16
VFD		
VFD	41-4340100-00-13	VFD 16-BT-93GNK
RESISTORS	44 0100000 51 00	DEC CMD 10K OUM 50/
R201-R207, R212, R213, R215, R219, R223-R224, R226-R227, R229, R231-R232	44-0100220-51-00	RES SMD 10K OHM 5%
R209-R210		RES SMD 10M OHM 5%
R233		RES SMD 47K OHM 5%
R216		RES SMD 390 OHM 5%
R217-R218		RES SMD 1.5K OHM 5%
R220, R236, R237		RES SMD 4.7K OHM 5%
R221, R230		RES SMD 2.2K OHM 5%
R222		RES SMD 220 OHM 5%
R238		RES SMD 12K OHM 5%
R241, R242	44-0100020-51-00	RES SMD 100 OHM 5%
LED BOARD		
LED		
D211	26-0012305-01-17	LED RED-GREEN 3RGSW-1-A
MAIN ROARD		
MAIN BOARD  DIODES		
D701-D710,D713	20-1001401-20-44	DIODE RECT 1A/400V D041 1N4004
D711		DIODE ZENER BZX55 27V 1/2W 5%
D711 D712,D714		DIODE SW 4NS DO35 IN4148
D715		DIODE BRI 4A/70V RS402L
D716-D717		DIODE ZENER ZY5.1 2W 10%
TRANSISTOR		
Q701	21-0000140-00-11	XTR NPN HFE 120 100MHz SS8050C

Reference No.	Part No.	Description
CAPACITORS		
C701,C705-C706,C716	22-3102032-00-28	CAP ELEC GR 1000uF 25V 20%
C702,C719,C723	22-3101022-00-43	CAP ELEC SS 100uF 16V 20%
C704	22-3332032-00-28	CAP ELEC GR 3300uF 25V 20%
C707,C721,C724	22-3222032-00-34	CAP ELEC GS 2200uF 25V 20%
C710	22-3470052-00-43	CAP ELEC SS 47uF 50V 20%
C711-C713	22-3102052-00-28	CAP ELEC GR 1000uF 50V 20%
REGULATORS		
U701,U704-U706	27-3000501-17-14	I.C. VOLT REG 5V 1A NJM7805FA
U702	27-3001201-17-14	I.C. VOLT REG 12V 1A NJM7812
U703	27-3101201-13-14	I.C. VOLT REG F NJM7912
MULTI-CHANNEL BOARD		
DIODE	00 000000 00 10	DIODE OW AND DOOF INJA 40
D601	20-0000000-00-13	DIODE SW 4NS DO35 IN4148
TRANSISTORS	01 0000000 00 00	VTD NDN 1155000 700 00M15
Q601-Q602	21-0000360-00-00	XTR NPN HFE200-700 30MHz 2SC2878A
Q603	21-0100390-70-14	XTR PNP HFE 30 250MHz SPT DTA 114ESA
Q604	21-0000400-70-14	XTR NPN HFE30 250MHz SPT DTC114ESA
Q626,Q628	21-0000120-70-14	XTR NPN HFE 68 30MHz SPT DTC144ES
Q627	21-0000450-70-14	XTR PNP 68 250MHz SPT DTA144ESA
CAPACITORS		
C607,C611-C612, C619-C622	22-3220022-00-43	CAP ELEC GS 22uF 16V 20%
C623,C681-C683		
C626	22-3221022-00-43	CAP ELEC SS 220uF 16V 20%
C677-C690	22-3470022-00-43	CAP ELEC SS 47uF 16V 20%
RESISTORS		
J601-J603	44-0000027-11-00	RES SMD 0 OHM 5%
ICS		
U601	27-7891640-21-11	I.C. ANALOG FUNCTION SW TC9164AN
U604	27-9496600-21-02	I.C. QUAD BILATERAL SW LC4966
U605-U608	27-7055320-18-14	I.C. LOW NOISE OP-AMP NJM5532M
RCA JACKS		
M601	34-4060420-00-60	RCA JACK 6 R-R-R/W-W-W GOLD RCA-653D-04
M602	34-4020320-00-60	RCA JACK 2 B/B GOLD RS-253G-02
M603	34-4040420-00-60	RCA JACK 4 R-R/W-W GOLD RS-453G-04

Reference No.	Part No.	<u>Description</u>
PRE-OUT BOARD		
DIODES		
D602,D604	20-3275902-00-01	DIODE ZENER BZX55 7.5V 1/2W 5%
D605-D609, D611-D615	20-0000000-00-13	DIODE SW 4NS DO35 IN4148
TRANSISTORS		
Q605	21-0000140-00-11	XTR NPN HFE 120 100MHz SS8050C
Q607	21-0100131-00-11	XTR PNP HFE 170 1.5A SS8550C
Q608-Q615	21-0000350-70-00	XTR NPN HFE200-700 30MHz SPT RN1241A
Q616,Q618,Q620,Q622,Q624	21-0100390-70-14	XTR PNP HFE 30 250MHz SPT DTA 114ESA
Q617,Q619,Q621,Q623,Q625	21-0000400-70-14	XTR NPN HFE30 250MHz SPT DTC114ESA
CAPACITORS		
C613-C618, C624-C625, C635-C636	22-3336052-00-43	CAP ELEC SS 3.3uF 50V 20%
C627-C628, C633-C634	22-3101022-00-43	CAP ELEC SS 100uF 16V 20%
C679-C680, C691-C692	22-3470022-00-43	CAP ELEC SS 47uF 16V 20%
C637, C642, C647, C652, C657, C662, C667,C672	22-3100022-00-43	CAP ELEC SS 10uF 16V 20%
C640, C645, C650,C655, C660, C665, C670, C675	22-3220022-00-43	CAP ELEC GS 22uF 16V 20%
C684-C688	22-3331022-00-28	CAP ELEC GR 330uF 16V 20%
C693-C694	22-4182203-10-10	CAP MYLAR KT-G 8.2nF 100V 10%
C695-C696	22-4115303-10-28	CAP MYLAR MCC-R 15nF 100V 10%
C697-C698	22-4233402-00-31	CAP MPF 0.33uF 63V 5%
RESISTORS		
J6101-J6104	44-0000027-11-00	RES SMD 0 OHM 5%
INDUCTOR		
L601	24-0101108-00-28	IND CHOKE 100uH 10%
100		
ICS	07 7000440 40 04	LO VOLTONE CONTROL
U602-U603	27-7262446-10-01	I.C. VOL/TONE CONTROL M62446FP
U609-U612	27-7055320-18-14	I.C. LOW NOISE OP-AMP NJM5532M
RCA JACKS		
M607	34-4040500-00-60	RCA JACK 4 R-W/R-W GOLD
	01 10 10000-00-00	RS-413G-08
M608,M610	34-4020300-00-60	RCA JACK 2 B/B GOLD RS-213G-02
M609	34-4040400-00-60	RCA JACK 4 R-R/W-W GOLD RS-413G-04
POWER SUPPLY BOARD		
CAPACITORS		
C763 <u></u>	2-1103470-35-45	CAP CER ECKDRS 10nF 400VAC
		+80/-20%

Reference No.		Part No.	Description
RESISTORS			
R751	<u> </u>	23-5228330-00-00	RES FUSIBLE 0.22 OHM 10% 1/2W
R754*AH	$\triangle$	23-0395230-00-00	RES CF 3.9M OHM 5% 1/2W
RELAY	٠		
M751*C	<u> </u>	32-3112100-02-97	RELAY 12VDC/10A SPST PCB OMI-SS-112LM
M751*AH	<u> </u>	32-1012100-01-97	RELAY 12VDC/10A 1P1T
DIODE			
D751			DIODE SW 4NS D035 IN4148
D752-D755		20-1001401-20-44	DIODE RECT 1A/400V D041 1N4004
<i>TRANSISTOR</i> Q751		21-0000010-00-46	XTR SS NPN HEF 100 200MHz
			TO-92 C1815Y
<i>LINE FILTER</i> L752	$\wedge$	24-5103050-01-25	LINE FILTER 10mH ET-24 NC-F0092-1
	<b>∠:</b> \	24-3100030-01-23	LINE FIETER TOMIT ET-24 NO-1 0032-1
FUSES & FUSE HOLDERS F751*AH	<b>⚠</b>	33-0181001-01-88	FUSE TIME-LAG 8A/250VAC
			5x20mm UL/CSA 5S
F752*AH	<u> </u>	33-0111006-00-48	FUSE 1.6A 250V TIME LAG LBC 5x20mm UL/CSA/VDE/SEMKO
F751*C	<u> </u>	33-0161002-00-48	FUSE TIME-LAG 5A/250VAC 5 X 20mm VDE TSD
F752*C	$\triangle$	33-0151006-00-48	FUSE 800mA 250V TIME LAG LBC 5x20mm UL/CSA/VDE/SEMKO
FH751-FH752	À	33-1000000-00-88	FUSE CLIP 0.05mm FC-53-11
POWER SWITCH BOARD			
CAPACITORS	<b>A</b>	00 4400 470 05 45	040 050 504000 40 5 40040
C764	<u>/</u> !\	22-1103470-35-45	CAP CER ECKDRS 10nF 400VAC +80/-20%
POWER SWITCH			
S751	À	35-0101109-00-67	SW POWER TV-8 10A 250VAC PS3-22SPA-P7AZ
			P33-223PA-P7AZ
SECONDARY BOARD			
JUMPER BAR JMP1-JMP4		11-0752007-80-01	JUMPER BAR DIA1.5 X 25 R.1
			25 2 2 Birtho / 201111
<b>RECTIFIER</b> D781		20-5125401 50 02	BRIDGE RECTIFIER 25A 400V MP254W
D/01		20-3123401-30-02	BR-25W
TRANSISTORS			
Q781-Q782		21-0100410-00-12	XTR PNP HFE 480-960 110MHz 2SA1016KG-AA

Reference No.	Part No.	Description
CAPACITORS		
C790-C791	22-3123072-00-41	CAP ELEC LP 12000uF 80V 20%
C781-C789	22-4210402-00-31	CAP MPF 0.1uF 63V 5%
RESISTORS		
R784-R785	23-2228232-00-00	RES MO 0.22 OHM 5% 1/2W
R790,R793 <u>1</u>	23-4228280-08-20	RES CE 0.22 OHM 5% 5W
R781-R783 <u>(1)</u>	23-5228330-00-00	RES FUSIBLE 0.22 OHM 10% 1/2W
SPEAKER BOARD SPEAKER TERMINALS		
M5101	34-3000022-00-60	SPEAKER TER 4P R/B W/O PLUG PT-430A-03
M8101	34-3000021-00-60	SPEAKER TER 6P R/B W/O PLUG PT-630A-03
S-VIDEO BOARD		
<b>DIODES</b> D4101-D4107	20-0000000-00-13	DIODE SW 4NS DO35 IN4148
TRANSISTORS		
Q4101,Q4103,Q4122	21-0000120-70-14	XTR NPN HFE 68 30MHz SPT DTC144ES
Q4102	21-0000450-70-14	XTR NPN 68 250MHz SPT DTA144ESA
Q4107-Q4112,Q4116-Q4119	21-0100370-70-14	XTR PNP HFE 270-560 140MHz 2SA933AS
Q4113-Q4114,Q4121,Q4124-Q4125, Q4128-Q4130	21-0000360-00-00	XTR NPN HFE200-700 30MHz 2SC2878A
Q4115,Q4126-Q4127	21-0000390-70-14	XTR NPN HFE270-560 180MHz 2SC1740S
Q4120,Q4123	21-0000380-70-14	XTR NPN HFE20 250MHz DTC-123ESA
CAPACITORS		
C4101-C4107,C4109-C4111,C4113-C4115, C4117-C4120,C4153,C4157	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20%
C4108,C4112,C4116,C4156	22-3471012-00-28	CAP ELEC GR 470uF 10V 20%
C4123-C4124	22-3221012-00-43	CAP ELEC SS 220uF 10V 20%
C4133,C4141	22-3106052-00-43	CAP ELEC SS 1uF 50V 20%
C4134,C4145,C4149	22-3101012-00-43	CAP ELEC SS 100uF 10V 20%
C4136,C4146	22-4247402-00-31	CAP MPF 0.47uF 63V 5%
C4137,C4144	22-3477052-00-43	CAP ELEC SS 0.47uF 50 20%
C4138	22-7300210-00-01	CAP VC 30pF 20%
C4150,C4158	22-3470022-00-43	CAP ELEC SS 47uF 16V 20%
C4151	22-3100022-00-43	CAP ELEC SS 10uF 16V 20%
INDUCTORS		
1.4404	24-0569107-00-28	IND CHOKE 5.6uH 10%
L4101	2 . 0000 . 0 . 00 . 20	

ICS	
U4102,U4103       27-5076250-21-23       I.C. AV SWITCH BA7625         U4104       27-9496600-21-02       I.C. QUAD BILATERAL SWITCH LOCAL SWITCH	
U4104   27-9496600-21-02   I.C. QUAD BILATERAL SWITCH LOCK   CRYSTALS   X4101   28-5143200-06-19   CRYSTAL 14.318MHz 30ppm HC-2	
U4104   27-9496600-21-02   I.C. QUAD BILATERAL SWITCH LOCAL	
X4101 X4102  28-5143200-06-19 CRYSTAL 14.318MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 14.318MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 14.318MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 14.318MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 14.318MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 18.18 CRYSTAL 14.318MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 18.18 CRYSTAL 14.318MHz 30ppm HC-4 CRYSTAL 18.18 CRYSTAL 14.318MHz 30ppm HC-4 CRYSTAL 18.18 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 18.18 CRYSTAL	4966
X4101 X4102  28-5143200-06-19 CRYSTAL 14.318MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 14.318MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 14.318MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 14.318MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 14.318MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 18.18 CRYSTAL 14.318MHz 30ppm HC-4 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 18.18 CRYSTAL 14.318MHz 30ppm HC-4 CRYSTAL 18.18 CRYSTAL 14.318MHz 30ppm HC-4 CRYSTAL 18.18 CRYSTAL 17.73447MHz 30ppm HC-4 CRYSTAL 18.18 CRYSTAL	
X4102   28-5177200-06-19   CRYSTAL 17.73447MHz 30ppm H0	
DIN JACKS         M411-M418       34-4110300-00-60       DIN JACK 1 BLACK MD-113         TRIGGER BOARD DIODE       DIODE       DIODE ZENER BZX55 5.1V 1/2W 5         TRANSISTOR Q351       21-0000380-70-14       XTR NPN HFE20 250MHz DTC-12S         REGULATORS       XTR NPN HFE20 250MHz DTC-12S	·9S
M411-M418       34-4110300-00-60       DIN JACK 1 BLACK MD-113         TRIGGER BOARD DIODE       20-3251902-00-01       DIODE ZENER BZX55 5.1V 1/2W 5         TRANSISTOR Q351       21-0000380-70-14       XTR NPN HFE20 250MHz DTC-123         REGULATORS       21-0000380-70-14       XTR NPN HFE20 250MHz DTC-123	)-49S
M411-M418       34-4110300-00-60       DIN JACK 1 BLACK MD-113         TRIGGER BOARD DIODE       20-3251902-00-01       DIODE ZENER BZX55 5.1V 1/2W 5         TRANSISTOR Q351       21-0000380-70-14       XTR NPN HFE20 250MHz DTC-123         REGULATORS       21-0000380-70-14       XTR NPN HFE20 250MHz DTC-123	
TRIGGER BOARD DIODE D351  20-3251902-00-01 DIODE ZENER BZX55 5.1V 1/2W 5  TRANSISTOR Q351  21-0000380-70-14 XTR NPN HFE20 250MHz DTC-123	
DIODE         D351       20-3251902-00-01       DIODE ZENER BZX55 5.1V 1/2W 5         TRANSISTOR       21-0000380-70-14       XTR NPN HFE20 250MHz DTC-123         REGULATORS       21-0000380-70-14       XTR NPN HFE20 250MHz DTC-123	
D351 20-3251902-00-01 DIODE ZENER BZX55 5.1V 1/2W 5  **TRANSISTOR** Q351 21-0000380-70-14 XTR NPN HFE20 250MHz DTC-123  **REGULATORS**	
TRANSISTOR         21-0000380-70-14         XTR NPN HFE20 250MHz DTC-120           REGULATORS         21-0000380-70-14         XTR NPN HFE20 250MHz DTC-120	0/
Q351 21-0000380-70-14 XTR NPN HFE20 250MHz DTC-123  **REGULATORS**	%
REGULATORS	
	3ESA
U351-U352   27-3001291-07-14 I.C. VOLT REG 12V 100mA 78L12	
JACKS	4
M351 34-4020420-00-60 RCA JACK 2 R-W GOLD RS-253-04	
M353,M355 34-4310300-00-60 PHONE JACK 1 BLACK 3.5mm RIG ST-030-07	НТ
M354,M352 34-4320300-00-67 PHONE JACK 3.5mm 2P RIGHT	
JY-3552-01-330	
SWITCH	
S351 35-4102209-00-67 SW SLIDE 2P2T JSK022N09-G09	
VIDEO-6 BOARD	
CAPACITORS	
C4401-C4403 22-3226052-00-44 CAP ELEC SS 2.2uF 50V 20%	
JACKS	
J4401 34-4510302-00-60 PHONE JACK D6.3 1 ST-016S-01	
M4401 34-4010000-01-60 RCA JACK 1 YELLOW GOLD RS-105G/Y	
M4402 34-4110300-00-60 DIN JACK 1 BLACK MD-113	
M4403 34-4010200-01-60 RCA 1 WHITE GOLD RS-105AG/W	
M4404 34-4010100-01-60 RCA JACK 1 RED GOLD RS-105AC	ì/R
<u>VIDEO BOARD</u>	
TRANSISTORS	
Q4201-Q4203   21-0100370-70-14   XTR PNP HFE 270-560 140MHz   2SA933AS	
23A333A3	

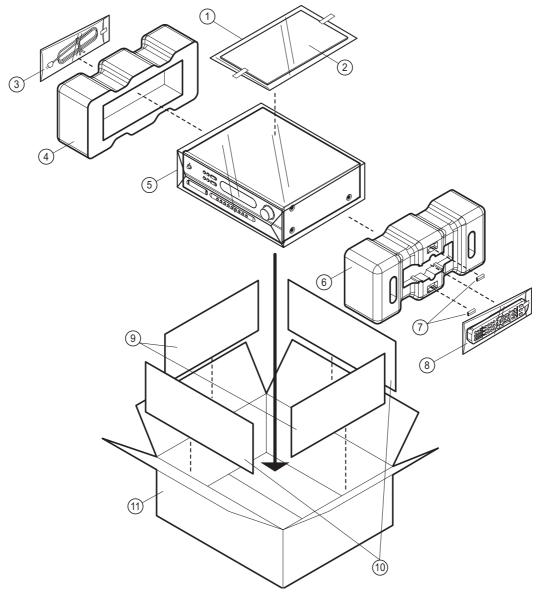
Reference No.	Part No.	<u>Description</u>
CAPACITORS		
C4201-C4203, C4205, C4207,	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20%
C4209-C4210		
C4204, C4206, C4208, C4211	22-3471012-00-28	CAP ELEC GR 470uF 10V 20%
ICS		
U4202	27-5076250-21-23	I.C. AV SWITCH DIP BA7625
U4201	27-9496600-21-02	I.C. QUAD BILATERAL SWITCH LC4966
RCA JACKS		
M421-M422	34-4040020-00-60	RCA JACK 4 Y-Y/Y-Y GOLD RS-454-03

NOTE: THE COMPONENTS IDENTIFIED BY <u>MARK ARE CRITICAL FOR RISK OF FIRE AND ELECTRICAL SHOCK.</u> REPLACE ONLY WITH PART NUMBER SPECIFIED.

<\*AH > : USA, CANADIAN MODEL ONLY. <\*C > : EUROPEAN MODEL ONLY.

RESISTORS: MO-METAL OXIDE, CE-CERAMIC CASE.

# **PACKING DIAGRAM**



<u>ltem</u>	Part No.	Description	Qty.
1	64-0200001-01-00	POLYBAG MANUAL	1
2	61-0752004-42-99	OWNER'S MANUAL GB/F/D/NL	1
	61-0752004-43-99	OWNER'S MANUAL E/I/P/S	1
	31-6472801-00-28	AM LOOP ANTENNA	1
	31-6407520-00-98	FM ANTENNA	1
	34-0081004-00-48	300 TO 75 OHM ADAPTOR	1
3	36-2061010-07-94 *AH	POWER CORD	1
	36-2283110-07-96 *C	POWER CORD	1
4	63-0752001-00-01	POLYFOAM ENDCAP L	1
5	64-0700001-00-01	POLYBAG UNIT	1
6	63-0752002-00-00	POLYFOAM ENDCAP R	1
7	37-0020200-00-79	BATTERY AAA 1.5V	4
8	83-0752000-00-04	REMOTE HANDSET NAD HTR-2	1
9	67-0752002-11-99	CARTON SHEET 490 X 225 MM	2
10	67-0752001-10-99	CARTON SHEET 560 X 225 MM	2
11	67-0752000-10-99	CARTON BOX	1

# **VERSION HISTORY**

SERIAL NUMBER	SOFTWARE VER.	PCB ASSEMBLY VERSION
R28T75200001-R28T75200050	8.3	A6 PCB ASSEMBLY KEYBOARD, DSP BOARD, TRIGGER BOARD, MAIN BOARD, VIDEO 6 BOARD, PRE-OUT BOARD, MULTI-CHANNEL BOARD, SECONDARY BOARD, LED BOARD, DIGITAL BOARD, POWER SWITCH BOARD, COMPONENT VIDEO BOARD. A7 PCB ASSEMBLY FRONT & CENTER AMP BOARD, SUR ROUND AMP BOARD, AUDIO BOARD, S- VIDEO BOARD, COMPOSITE VIDEO BOARD, POWER SUPPLY BOARD, SPEAKER BOARD.
R28T75200051-R28T75200280	8.3	A6 PCB ASSEMBLY KEYBOARD, DSP BOARD, TRIGGER BOARD, MAIN BOARD, VIDEO 6 BOARD, PRE-OUT BOARD, MULTI-CHANNEL BOARD, SECONDARY BOARD, LED BOARD, DIGITAL BOARD, POWER SWITCH BOARD.  A7 PCB ASSEMBLY FRONT & CENTER AMP BOARD, SUR ROUND AMP BOARD, AUDIO BOARD, S- VIDEO BOARD, COMPOSITE VIDEO BOARD, POWER SUPPLY BOARD, SPEAKER BOARD, COMPONENT VIDEO BOARD.
R28T75200401-R28T75200481	V1.02.A6	A6 PCB ASSEMBLY  KEYBOARD, DSP BOARD, TRIGGER BOARD, MAIN BOARD, VIDEO 6 BOARD, PRE-OUT BOARD, MULTI-CHANNEL BOARD, SECONDARY BOARD, LED BOARD, DIGITAL BOARD, POWER SWITCH BOARD.  A7 PCB ASSEMBLY  FRONT & CENTER AMP BOARD, SUR ROUND AMP BOARD, AUDIO BOARD, S- VIDEO BOARD, COMPOSITE VIDEO BOARD, POWER SUPPLY BOARD, SPEAKER BOARD, COMPONENT VIDEO BOARD.
R28T75200281-R28T75200400 R28T75200482-R28T75200681	V1.04.07	ALL ARE A7 PCB ASSEMBLY
R29T75200682-R29T75201253	V1.06.07	ALL ARE A7 PCB ASSEMBLY
R29T75201254-R29T75202800	V1.06.07	ALL ARE A8 PCB ASSEMBLY
R2XT75203301-R2XT75203460	V1.06.07	ALL ARE A7 PCB ASSEMBLY
R2XT75202801-R2XT75203300 R2XT75203461-R2XT75203514	V1.06.07	ALL ARE A8 PCB ASSEMBLY
R2XT75203515-R2XT75204550	V1.06.07	ALL PCB ASSEMBLIES MARKED 55-0752XXX-XX-01
R2YT75204551-R2YT75205374 R2YT75205601-R2YT75206060	V1.06.07	ALL PCB ASSEMBLIES MARKED 55-0752XXX-XX-01

# **NOTES:**

# SERVICE MANUAL

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T 752

AV SURROUND
SOUND RECEIVER